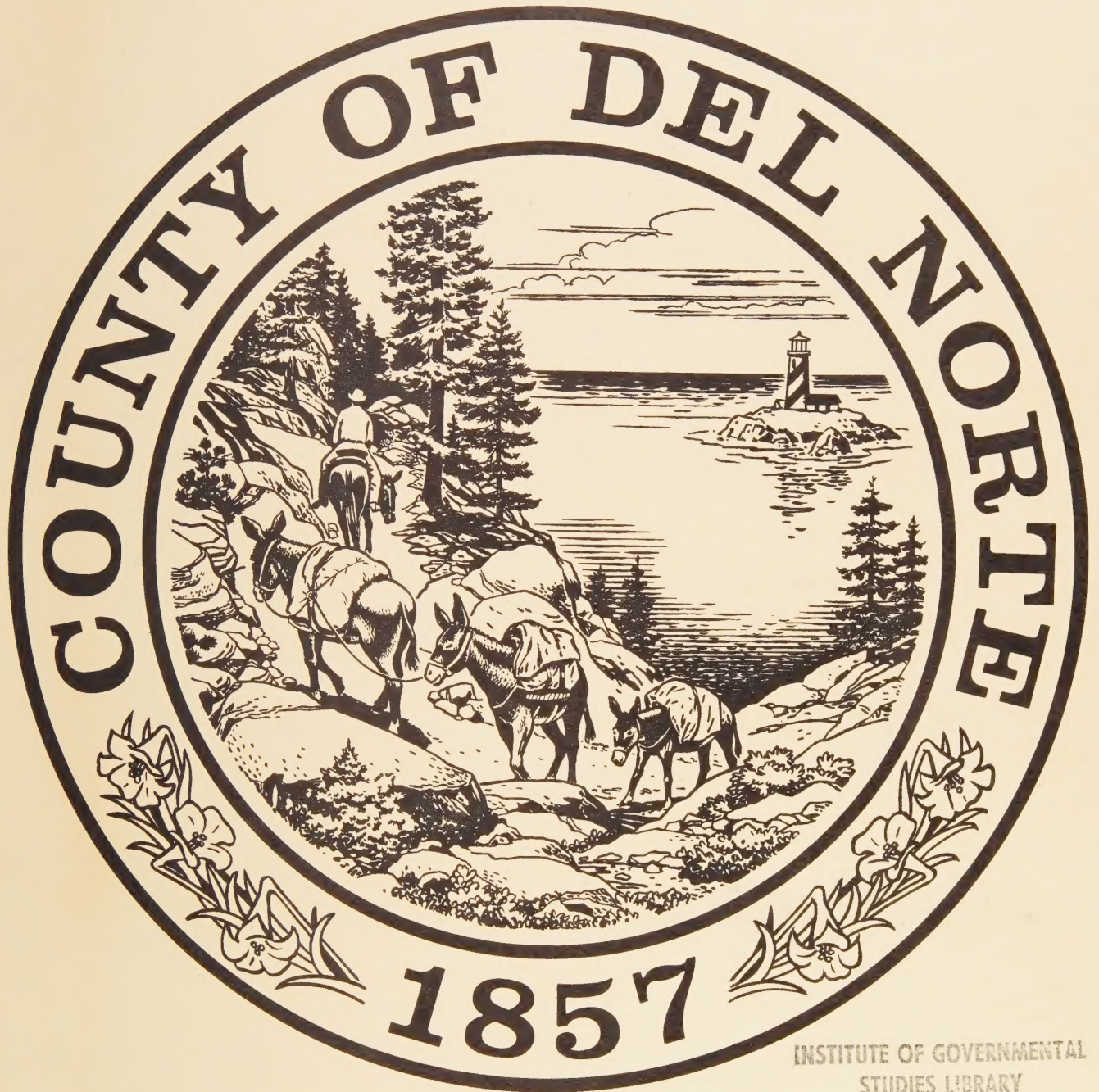


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DEL NORTE COUNTY GENERAL PLAN

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Introduction

The County of Del Norte in 1973, adopted a General Plan prepared by Daniel, Mann, Johnson and Mendenhall. This Plan was determined by the Board of Supervisors of Del Norte County to be inadequate. During the fiscal year 1975-76, the following revised General Plan for the County of Del Norte was prepared, in part, through an assistance grant from Department of Housing and Urban Development and with the co-operation of local, state and federal agencies.

Description of a General Plan

In recent years the State has enacted legislation mandating local government to prepare more comprehensive General Plans. Broadly speaking, a General Plan is a statement of general policies and procedures governing the development of the planning area. A General Plan is to be adopted by the Board of Supervisors, after public hearings, upon recommendation from the Planning Commission (which also must hold public hearings). It is to include, but not be limited to, policies governing:*

Land Uses - General distribution, and general location and extent, of land for housing, business, industry, open space, agriculture, natural resources, recreation, education, public buildings and grounds; population density policies, building intensity policies, and identification of areas subject to flooding; location and policies governing solid and liquid waste disposal facilities.

Circulation - General location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities.

Housing - Standards and plans for the improvement of housing and for provision of adequate sites for housing (for needs of all economic segments of the community).

Conservation - Conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources.

Open Space - Policies governing essentially unimproved land or water which is a natural resource, agricultural land, scenic land, watershed or ground water recharge areas, and wildlife habitats.

Seismic Safety - An identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to effects of seismically induced waves such as tsunamis and seiches.

* Source: The Government Code, State of California, Sections 65300-65303 and 65560.

Noise - In quantitative, numerical terms, an analysis showing contours of present and projected noise levels associated with all existing and proposed transportation elements.

Safety - Policies for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and geologic hazard mapping in areas of known geologic hazards.

Scenic Highways - Policies for the development, establishment, and protection of scenic highways (pursuant to Section 260 of the Streets and Highways Code).

Basic Assumptions

The General Plan is based on the primary assumption that the quality of life in the County can be improved by the participation of citizens and public officials in a concerted planning effort.

A second major assumption is that the County will pursue a policy of accommodating growth compatible with local social, economic and environmental objectives and standards. The emphasis will be placed on controlling and guiding growth rather than a no-growth policy.

The last major assumption is that the City, County, and Harbor District will continue to work toward common goals in guiding the future development of the County.

Purpose of a General Plan

A revised and adopted General Plan will serve several important purposes:

Legal - To meet the requirements of the State Planning Act of the California Government Code with respect to mandatory elements, and consistency of zoning regulations with the land use element of the General Plan. It is a strong possibility that the Legislature's intent is to lead cities and counties into a new era of planning, where general plans become policies and programs, and are not merely guidelines. Local agencies not having properly prepared and adopted General Plans and regulatory measures can expect, in the future, to face State sanctions of one sort or another if they fail to meet the new requirements of the Act. Moreover, land use regulations and impact assessment procedures can be expected to be based upon the General Plan.

Policy - To formulate and clarify local public policies with respect to the rights and expectations of the general public property owners and future developers. To develop an acceptable local plan which will strengthen local governments control of development decisions.

Educational - To enable local residents, public agencies, and prospective investors and businessmen to become informed of the County's goals, policies, and development standards; and to provide a basis for a better determination and understanding of these goals, policies and standards.

Coordinative - To establish a basis for coordination, understanding and negotiation among public agencies who have jurisdiction within Del Norte County, and to present the local position on regional and local issues appropriate to County-wide concerns and responsibilities.

For Del Norte County, the revised General Plan will be a composite of many policies, programs and intended actions to govern the future physical development of the County. The policies are designed to maintain and enhance existing development, and to provide for orderly and appropriate new development to meet the needs of the area over the next twenty years. Although the plan covers the period from 1975 to 1995, the emphasis in this document is on action which should be taken in the more immediate future.

Several criteria have been applied in the preparation of this General Plan which will serve to distinguish it from many other General Plans. It has been recognized that to be effective the plan should be prepared in a form which readily permits supplementation and amendment. It is hoped that the loose-leaf format, and the presentation on a chapter by chapter basis will serve this purpose, and avoid the monolithic take-it-or-ignore-it character of many General Plans. To a great extent the policies have been formulated from the standpoint of what is achievable and feasible, now or in the relatively short term future. While this may diminish the visionary or utopian character of the Plan to some extent, it is increasingly less acceptable to set planning objectives or policies which are not implementable from a practical standpoint or which have only a decorative purpose. In some instances the expression of the policies has involved difficult trade-offs between conflicting purposes or values. The results are not likely to please everyone, and in some cases represent the apparently least undesirable of several unsatisfactory alternatives.

Maintaining the General Plan

Under the State Zoning Law, each City and County shall adopt a comprehensive long-term General Plan for the physical development of a county or city and of any land outside its boundaries which in its judgment bears relation to its planning. In 1975, the Legislature added a new section to the Government Code which provided that it is the Legislative intent that the General Plan and its elements and parts thereof comprise an integrated, internally consistent and compatible statement of policy for the adopting agency.

The California Government Code also requires that all zoning ordinances shall be consistent with the General Plan and if an ordinance becomes inconsistent, the ordinance shall be amended so that there is consistency. Section 65850 provides the procedure for conformity and enforcement.

By law, consistency exists between zoning and the General Plan when the City or County has officially adopted such a plan and the various land uses authorized by the zoning ordinance are compatible with the objectives, policies, general land uses, and program specified in the plan. In determining consistency, the texts of the two documents are the deciding factor. The Attorney General states in 58 Ops. Cal. Atty. Gen. 21:

"... As a general approach we [the Attorney Generals Office] endorse the statement in the 'General Plan Guidelines' that 'The zoning ordinance should be considered consistent with the General Plan when the allowable uses and standards further the policies in the General Plan and do not inhibit or obstruct the attainment of those articulated policies.' ..."

(In that a conditional use permit does not alter a zoning designation it is considered acceptable within the scope of the above.)

The following principles should be considered when making determination as to the consistency of the various zoning districts with the General Plan land use categories:

- (a) To the greatest degree possible, zoning districts should be established in areas with corresponding General Plan land use designations.
- (b) No zoning district should be applied where the district's permitted uses would be more intensive than those indicated by the General Plan. Residential development is more intensive than rural use, high density residential development is more intensive than low density residential development, and commercial and industrial development are more intensive than residential development.
- (c) It is acceptable to apply zoning districts which permit lower intensity use in areas designated by the General Plan for higher intensity use, if it does not preclude the plan designation.

In addition to the requirement that zoning be consistent with the plan, the approval of subdivisions and the issuance of building permits must be consistent with the open space section of the plan. Also Sections 65400-65402 of the Government Code directs the planning agency (Planning Commission) to take the following steps:

- a) Investigate and recommend measures for implementing the General Plan, including "...plans, regulations, financial reports and capital budgets. ..."
- b) Submit an annual report to the Board of Supervisors on the status and application of the General Plan.
- c) Promote public interest in an understanding of the Plan and regulations relating to it.

- d) Consult and advise with other agencies, groups and the public on ways of carrying out the Plan.
- e) Review for conformity with the General Plan referrals by public agencies regarding real property acquisitions and dispositions, and construction of public works and buildings.

Section 34217 of the Government Code provides that on October 1 of each year the County shall file with the Council on Intergovernmental Relations a complete report of the County's transactions and recommendations during the previous fiscal year, including recommendations for needed legislation respecting planning. This report shall indicate the degree to which the County's approved General Plan complies with the guidelines developed by the Council in Intergovernmental relations.

As the General Plan, in response to both changes in state law and legal interpretations, becomes less of a "guideline" and more nearly a definitive statement of public policy, the process of maintaining the plan as a viable document becomes more significant for all the parties involved. Section 65361 of the Government Code currently limits the number of General Plan Amendments to three per calendar year, therefore amending the plan should not be taken casually.

The following is recommended as procedure for the amendment process:

PLANNING COMMISSION PUBLIC HEARING: NOTICE

The Planning Commission shall hold at least one public hearing before approving a General Plan amendment. Notice of the time and place of the hearing shall be given at least ten (10) calendar days before the hearing in the following manner:

The notice shall be published at least once in a newspaper of general circulation published and circulated within the County.

In addition to notice by publication, notice of the hearing may be given in such other manner as the County may deem necessary and/or desirable.

Any hearing may be continued.

APPROVAL BY RESOLUTION: NUMBER OF MEMBERS REQUIRED TO APPROVE

The approval by the Planning Commission of the General Plan amendment shall be by Resolution of the Commission carried by the affirmative votes of not less than a majority of its total voting members.

TRANSMISSION OF APPROVED AMENDMENT TO THE BOARD OF SUPERVISORS

Upon approval by the Planning Commission of the General Plan amendment, it shall be transmitted to the Board of Supervisors.

BOARD OF SUPERVISORS HEARING: NOTICE

Before adopting the General Plan amendment, the Board of Supervisors shall hold at least one public hearing. Notice of the time and place of the hearing shall be given in the time and manner provided with the procedures of the board for public hearing items.

BOARD OF SUPERVISORS INITIATION OF AMENDMENT PROCEDURES

When it deems it to be in the public interest, the Board of Supervisors may change or add to all or part of the adopted General Plan. The Board of Supervisors shall first refer the proposed change or addition to the Planning Commission for a report. Before making such report the Planning Commission shall hold at least one hearing on the proposed change or addition. Notice of the time and place of such a hearing shall be given in the time and manner specified above. The Planning Commission's report shall be completed not later than ninety (90) days after the referral.

APPROVAL BY RESOLUTION OF THE BOARD OF SUPERVISORS

The adoption of the General Plan amendment shall be by Resolution of the Board of Supervisors.

AMENDMENTS OF MANDATORY ELEMENTS

No mandatory element of a General Plan shall be amended more frequently than three times during any calendar year, which amendment or amendments may occur at any time as determined by the Board of Supervisors. This Section shall not apply to the adoption of any new element to the General Plan.

HOUSING



Introduction

Government Code Section 65302(c) requires a Housing Element of all City and County General Plans as follows:

A Housing Element, to be developed pursuant to regulations established under Section 37041 of the Health and Safety Code, consisting of standards and plans for the improvement of housing and for provision of adequate sites for housing. This Element of the General Plan shall make adequate provision of the housing needs of all economic segments of the community.

It appears that the intent of this section was to give impetus to the construction of low-cost housing for minority groups in metropolitan areas. The legislation actually seems to have little relationship to the rural counties, but no distinction was made by the legislature as between rural and metropolitan counties. Therefore, the Housing Element for Del Norte County has been developed in accordance with the requirements of State law but tailored to the rural needs of the County including future housing need and development.

The goals of the Housing Element are:

- 1) The recognition of housing problems and needs in general plan activities.
- 2) Providing the basis for the orderly development of adequate, safe and sanitary housing for the residents of the County.

Housing Supply

Table I describes the number, type, size and distribution of housing units throughout the County. Just under 80% of the housing of the County was single family residences, with the highest concentration of multi-family units being within the Crescent City limits. Mobile homes amount to only 10/2% of the housing units, with the highest density of those being located in the Railroad Avenue area.

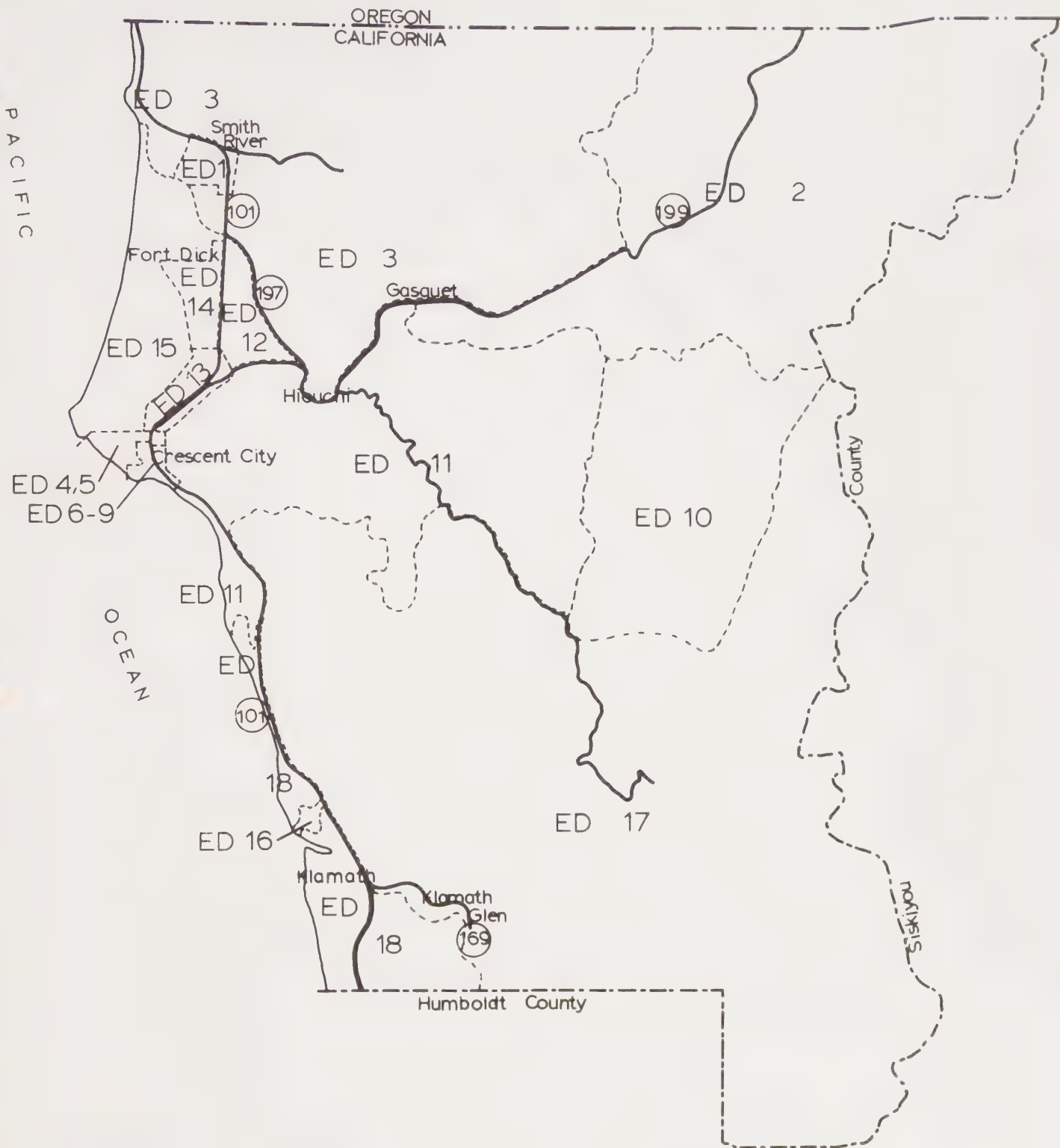
In the provision of housing, the size of the units is almost as important as the number, 49% of the housing units of the County contain five or more rooms with 51% of the City containing five or more rooms.

The number of persons per unit in both the City and County is dominated by two person units. The next frequent is one person units.

The 1960 Census indicates a total housing unit count for the City of Crescent City of 1,090. The 1970 Census indicates a housing unit count of 998 for the City, or a loss of 92 units. City records, including demolitions, single family construction, multiple units construction and losses due to house moving, indicate a net gain of 105 houses between 1960 and 1970. A house to house count by the City in March 1971, indicates a total of 636 single family residences, 239 apartments, 124 multiple units, 1 trailer in a park (subtotal, 1,000), 19 motel and hotel residences and 4 trailers (total, 1,023);

TABLE I
INVENTORY OF HOUSING UNITS - 1970 CENSUS
(See Following Map Enumeration District Areas)

	DEL NORTE COUNTY	CITY OF CRESCENT CITY ED 6-9	CRESCENT CITY NORTH ED 4 and 5	TOWN OF SMITH RIVER ED 1	KLAMATH AREA ED 17 and 18	CRESCENT CITY EAST, DOUGLAS PARK ED 11	KINGS VALLEY AREA ED 12	RAILROAD AVENUE AREA ED 13	FORT DICK AREA ED 14	MOUTH OF SMITH RIVER, HIOUCHI, GASQUET AREA ED 3	LAKE EARL DRIVE WEST AREA ED 15	DEL NORTE COUNTY EAST ED 2 and 10
POPULATION	14,580	2,586	3,053	634	1,066	1,551	345	1,000	759	1,435	1,879	96
AGES 60+	2,061	332	457	69	167	211	35	144	111	360	169	24
PERMANENT HOUSING UNITS	5,311	998	1,116	218	403	545	125	364	259	630	581	44
SINGLE UNIT STRUCTURES	4,218 79%	667 67%	1,021 92%	165 76%	278 69%	471 86%	112 90%	234 64%	227 88%	534 85%	459 79%	42 96%
MULTIPLE UNIT STRUCTURES	549 10%	330 33%	47 4%	22 10%	11 3%	45 8%	9 7%	17 5%	2 0.8%	18 3%	27 5%	1 2%
OCCUPIED MOBILEHOMES	544 10%	1 0.1%	48 4%	31 14%	114 28%	29 5%	4 3%	113 31%	30 12%	78 12%	95 16%	1 2%
ONE ROOM UNITS	99	9	8	7	3	14	3	11	2	34	5	3
TWO ROOM UNITS	286	38	45	17	42	29	4	25	11	37	21	17
THREE ROOM UNITS	732	144	135	27	69	69	20	48	40	106	66	8
FOUR ROOM UNITS	1,567	299	365	45	122	172	30	112	76	172	164	9
FIVE ROOM UNITS	1,339	272	304	54	90	133	30	92	68	131	137	6
SIX ROOM UNITS	821	152	168	33	55	80	25	49	42	89	123	0
SEVEN ROOM UNITS	283	53	61	18	10	29	4	18	12	37	40	1
EIGHT ROOM UNITS OR MORE	184	31	30	17	12	19	9	9	8	24	25	0
ONE PERSON PER UNIT	802	181	156	34	67	83	18	56	36	91	68	12
TWO PERSONS PER UNIT	1,521	254	309	66	115	149	33	113	87	225	155	12
THREE PERSONS PER UNIT	737	142	168	27	57	60	24	47	39	80	88	0
FOUR PERSONS PER UNIT	735	143	152	37	52	83	18	56	34	54	94	2
FIVE PERSONS PER UNIT	466	77	106	15	31	54	6	38	26	37	69	1
SIX PERSONS PER UNIT	240	33	55	15	20	27	7	11	12	18	40	0
SEVEN PERSONS PER UNIT	121	19	20	6	9	16	4	6	8	8	22	1
EIGHT PERSONS PER UNIT	85	13	16	3	4	13	2	6	4	10	14	0



Enumeration Districts

DEL NORTE COUNTY, CALIFORNIA

the 1970 Census records 667 single family residences, 330 two or more units and one mobile home (occupied only) or a total of 998. The difference is probably in criteria used by the two agencies. Therefore, the 1970 Census can be considered reasonable accurate in housing counts with some question remaining unclear as to the, either, gain of 105 units or loss of 92 units, between 1960 and 1970. The important factor is that the 1970 Census can be considered reasonably accurate and provides a basis to work from.

Activity

Housing activity since the 1970 census consists of a very marginal net increase in conventional housing, usually less than 1%, and a significant increase in mobile homes.

Overall increase in total housing can be summarized in the following table:

Table II
Total Housing Unit Increase

<u>Year</u>	<u>Count</u>	<u>Net Increase</u>	<u>% Increase</u>
1970 Census	5311	----	----
1970	5381	70	1.3%
1971	5510	129	2.4%
1972	5661	151	2.7%
1973	5891	230	4.1%
1974	6045	154	2.6%
1975	6193	148	2.5%

Mobile homes have become increasingly important to satisfy housing. Both the State Vehicle Code and the Health and Safety Code define a mobile home as: "A vehicle designed for human habitation and for being drawn by a motor vehicle." The average mobile home is no longer that mobile, being moved again only after 5 1/2 years. These "vehicles" are becoming permanent homes with 9 out of 10 mobile home owners listing them as their principal place of residence. Except for taxing purposes, mobile homes are more properly considered as "relocatable factory-built housing units." In size, convenience and comfort the newer mobile homes are the equal of many of today's conventionally built houses. However, the use of mobile homes is not without its difficulties (see section title Mobile Homes).

Tables III and IV give a year to year description of housing units and their changes. The accompanying chart depicts graphically the increase in total housing units and the respective increase in mobile homes and conventional homes.

The difference between the total housing units created between the 1970 Census and the end of 1975 (552) and those estimated to be needed additionally by July 1, 1975 (330) is that the projected need was a minimum figure and did not include the last six months of 1975.

Table III

Conventional Housing
Not including Mobile Homes
as Indicated by Permit Activity

	County Only			Crescent City			Total	Net Increase Over Prior Year
	Single Family Residence	Demolitions	Multiple Family	Single Family Residence	Demolitions	Multiple Family		
1970 Census	3551		219	667		330	4767	----
1970	9	26	0	1	0	0	4751	-16 (1.34%)
1971	23	2	0	5	0	0	4777	26 (.55%)
1972	39	1	20	6	1	0	4840	63 (1.32%)
1973	45	3	0	2	6	9	4887	47 (1.0%)
1974	40	8	0	1	3	5	4922	35 (.7%)
1975	49	5	0	3	3	8	4974	52 (1.1%)

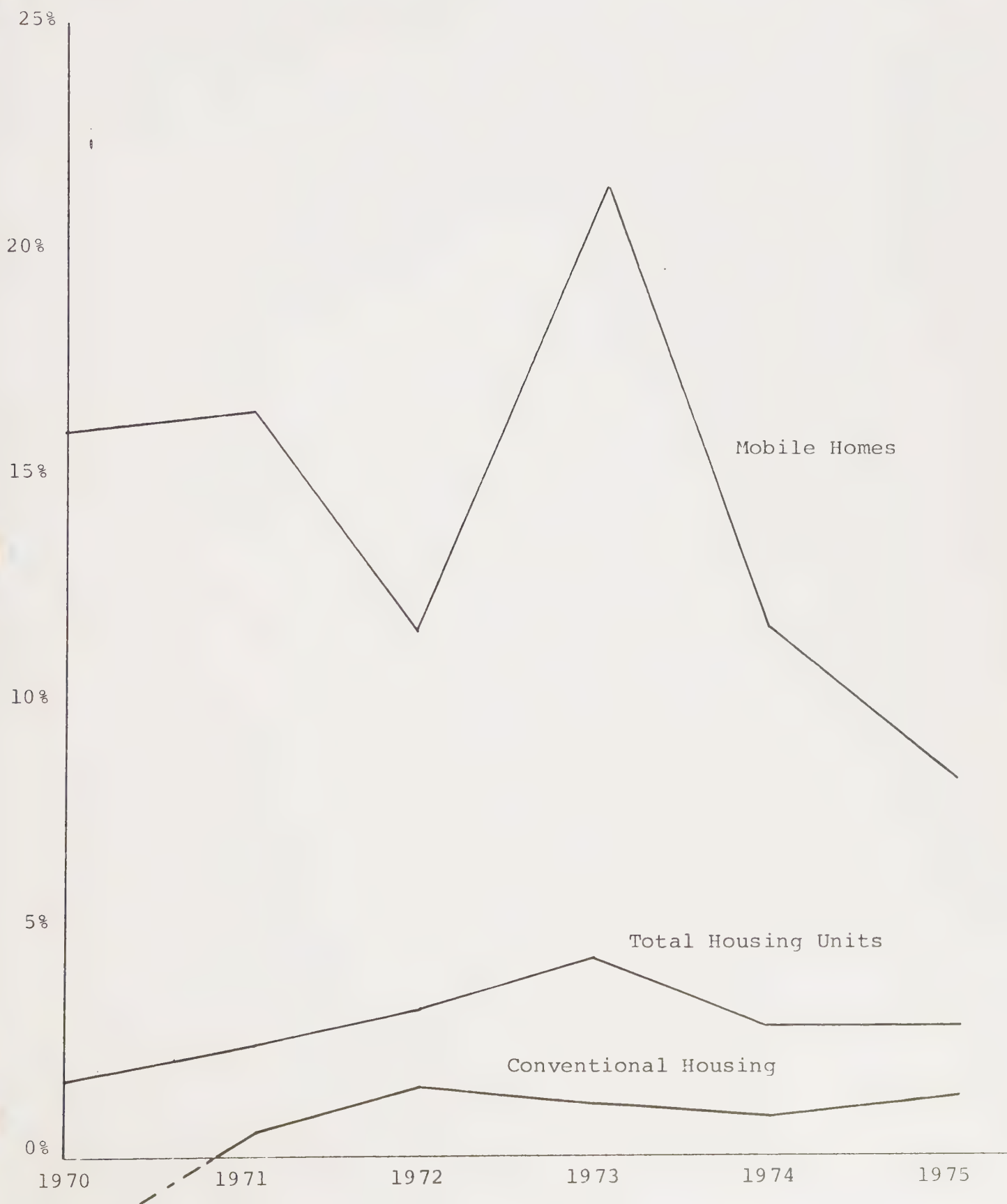
Table IV

Mobile Homes Considered
as Permanent
as Reported to the CA Dept. of Finance

		County Only		Crescent City	Total	Increase Over Prior Year
		In Parks	Outside of Parks	In Parks		
Census	1970	441	102	1	544	---
	1971*		178*		630*	86 (16%)
April 1st	1972	462	270	1	733	103 (16 1/2%)
Jan. 1st	1973	479	341	1	821	88 (12%)
Jan. 1st	1974	565	438	1	1004	183 (22%)
Jan. 1st	1975	582	533	8	1123	119 (12%)
As of Jan. 1, 1976		596	620	3	1219	96 (8 1/2%)

* No report was prepared during 1971, however, Building Department records indicate 76 mobilehomes were located outside of mobilehome parks during the year. Overall increases for 1971 are estimated.

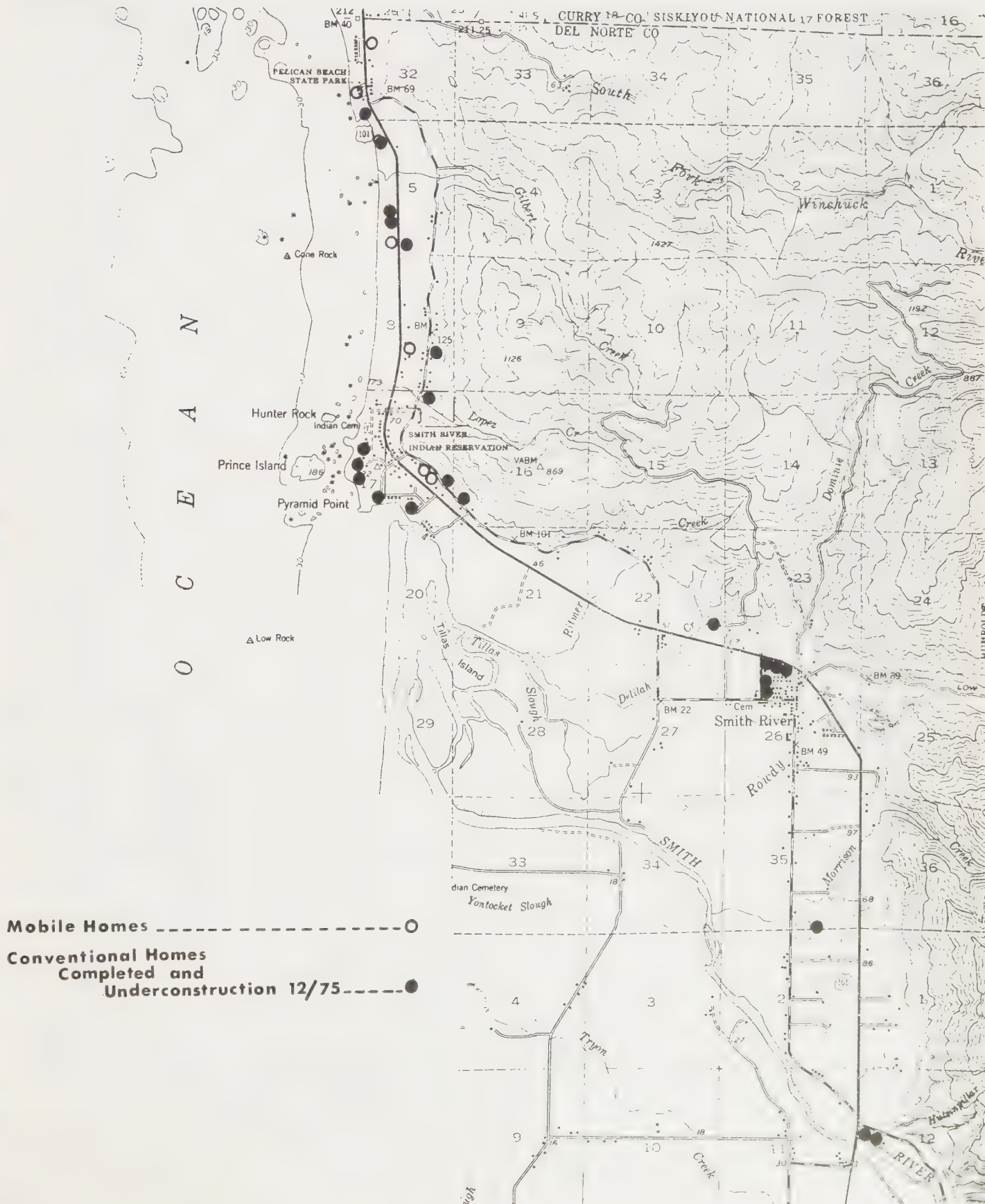
PERCENTAGE INCREASE OVER PRIOR YEAR

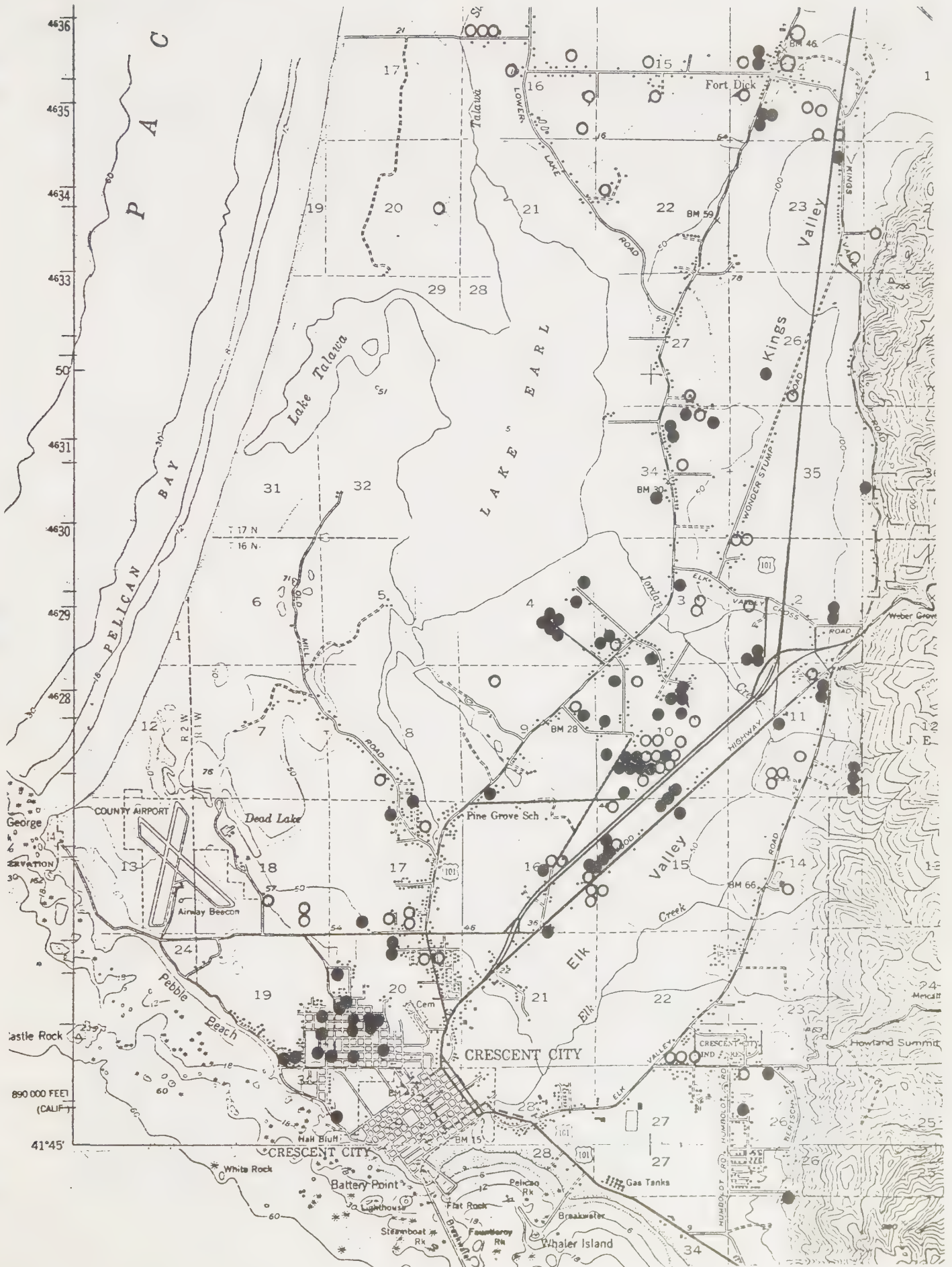


Not considered was the number of homes which have become obsolete or otherwise uninhabitable but not demolished. Population factors which could be concluded by this difference is a slightly higher population increase between 1970 and 1975 than estimated and an increase in the number of smaller families.

Distribution of new homes is indicated by the following maps for the year 1974 and 1975. These maps include the mobile homes located within the County during these years, homes that were completed and 54 building permits for dwellings that were in various stages of construction.

1974-75









Housing Condition and Quality

The Del Norte County Building Department estimates that approximately 14% of the total housing inventory in Del Norte County, are considered substandard because of their mechanical and electrical inadequacy, coupled with general deterioration due to substandard exterior surfacing.

The Bertsch Tract, Filkins Tract and Roosevelt Tract all have a serious problem of low standard and substandard housing. In several cases, the safety of the occupants has been endangered. Such conditions can be traced to the County growth boom in the 1950's; many housing units were built without the benefit of sanitation and safety inspections. These areas have experienced considerable environmental sanitation problems. The County Sanitarian has described these areas as follows:

a. Bertsch Tract (including the area along Elk Valley Road to Howland Hill Road):

"The groundwater is degraded with excessive iron and magnesium making it unpalatable; poor well construction affects the bacterial quality of the water. In many instances, the public health is endangered. Poor land use combines with the groundwater and unsafe water supply to create an even greater problem. Individual wells and individual disposal systems on the numerous small lots (25 to 100 feet) are not adequately separated. Sewage effluent seeps upon the surface of the ground because individual sewage disposal conditions at times are almost impervious or have an excessively high water table. Surface water drainage is such that sewage effluent discharges into the natural drainage channels and roadside ditches rendering them open sewers."

b. Filkins Tract:

"The major environmental sanitation problem facing the populous Filkins Tract which lies north of Crescent City is the existence of inadequate individual sewage disposal systems which are adversely affected by a high water table during the winter. While the majority of this well populated area is served by the Crescent City Municipal Water Department, some of the homes in the populated areas of the Filkins Tract have individual water supplies and individual sewage disposal systems. The Crescent City Municipal Water Department has performed well in protecting the public health within its jurisdiction, but areas outside are not afforded the same protection. Along with the high water table problem during the winter months which causes sewage effluent to seep upon the ground because of the terrain of the area, here too the drainage ditches and roadside ditches serve to pass the sewage effluent from individual properties down the watershed. This condition has the potential to develop into a serious public health problem."

c. Roosevelt Tract:

"This tract has a chronic sewage disposal problem which can only be solved by a public sewer system according to the County Sanitarian."

At present the area is served by individual sewage disposal systems and individual water systems. While lot size is adequate, terrain in the area aggravates the sewage problem. Several outbreaks of infectious hepatitis in the fringe area of Crescent City may possible be attributed to poor sanitation."

Recently, progress has been made in the Bertsch Tract area by the formation of a community services district with the emphasis being the installation of a community water system to serve the area and the installation of a sewer line system to tie into the sewer facility in Crescent City. Eventually a similar system and tie into the City facility is planned for the Filkins and Roosevelt areas.

The rural areas of the County have a heavy dependence upon individual wells and septic tanks. Many areas suffer from high water tables, in these areas increasing residential densities have the potential of creating similar situations to the Bertsch Tract area. However, the remedy of the problem as has been proposed in the Bertsch Area will not be as easily or at the lesser cost of tying into the City system due to the distances involved.

Del Norte County, through the action of the Board of Supervisors with financing from the Farm Home Administration and the services of Mr. James R. Hooper, Attorney at Law, was able to have made a Comprehensive Water Supply and Waste Water Sewage Disposal Plan by the engineering firm of Winzler and Kelly.

This Comprehensive Plan covers all areas of the County where there is any urban development and proposes solutions to the water supply and sewage disposal problems as they may now occur or will develop in the future. This Comprehensive Water Supply and Waste Water Disposal Plan will do much to provide guides to the County to solutions in solving problems of water supply and sewage disposal and protect the public health and safety of all concerned.

The conditions in the new town of Klamath are an exception to the general situation. Klamath has its own sewer and water utilities to service the maximum potential development of that area.

Mapping

The following two maps indicate the basic housing problem areas of the County and where improvements are needed. The first map describes areas of the County in terms of rehabilitation and conservation areas.

"Rehabilitation: means removal of substandard housing that is unfit and unsafe for human habitation; replacement by new housing; and improvement to acceptable standards of housing in a state of deterioration. The aim of rehabilitation is to restore and improve upon original residential values and quality.

"Conservation" areas is where the housing stock is fundamentally sound and where continuing maintenance and upkeep is needed to stabilize existing values and quality. A major feature in the conservation of existing housing of good quality is to upgrade the quality of the rest of the housing in the area in which the sound housing is located.

The second map gives a more detailed description of housing conditions in and around the Crescent City area. Further mapping at this scale can be considered following improved access to housing information from the Assessors Office by use of computerized data.

Housing Goals for Del Norte County

1. Decent, safe and sanitary housing for all economic segments of the community.
2. Inventory of housing units varied enough in location, size, type, price and tenure to meet community needs.
3. Freedom to choose and occupy housing.
4. Maintenance of buildings and neighborhoods in good physical condition.
5. Public recognition of housing needs and problems.
6. Integration of housing efforts with other community activities.
7. Adaption of housing plans and programs to future conditions.

Demand for Housing - Population

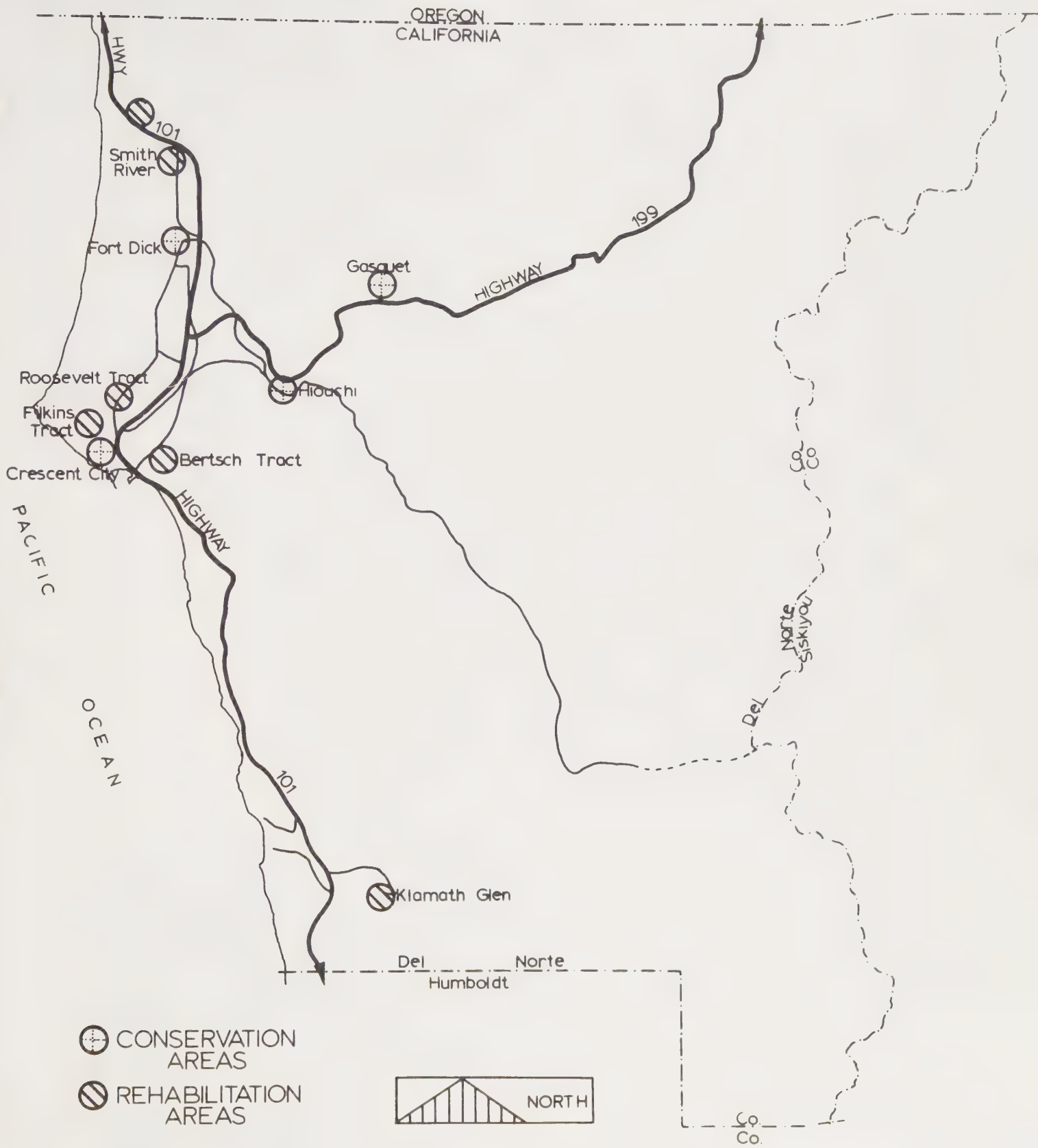
Number of Residents

Year	Del Norte County	% of State	Growth %	State Growth %
1930	4,739	.0835		
1940	4,745	.0687	.13	22
1950	8,476	.0763	70.2	53
1960	17,771	.1131	120.05	48
1970	14,580	.074	- 17.96	27

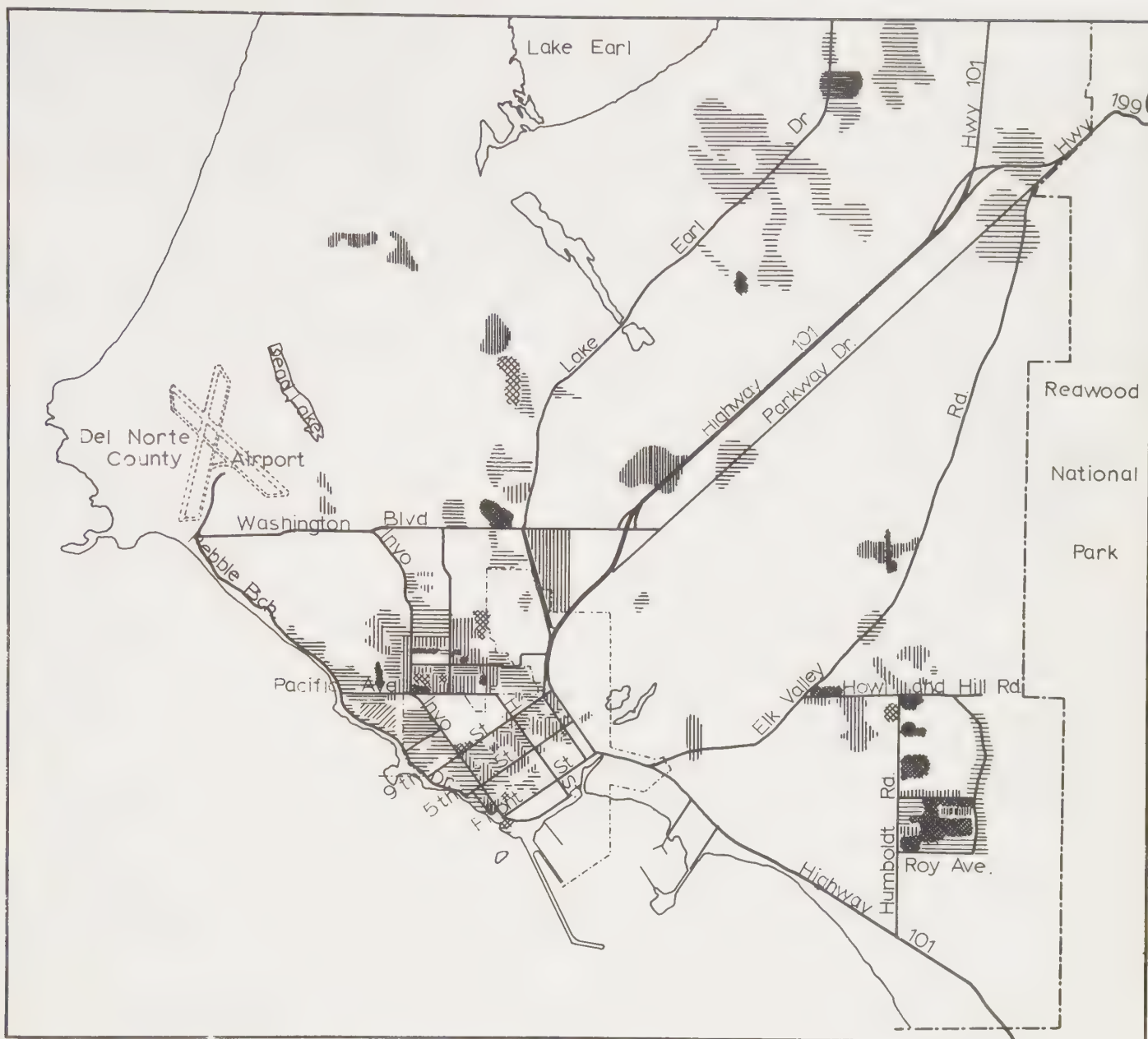
The above U.S. Census figures indicate a substantial increase in population during the 1940 and 1950 decades. The rate of growth of the County in comparison to the State somewhat parallels the State's growth with the County experiencing more dramatic increases and declines in population.

Migration and Population Growth

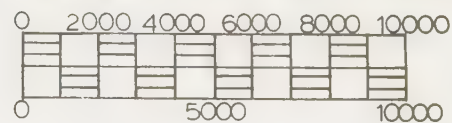
The most significant fact about the population of Del Norte County is that after remaining virtually stable from 1930 to 1940,



HOUSING ELEMENT



Housing Condition / Neighborhood Appearance



SCALE IN FEET



the population doubled between 1940 and 1950 and again between 1950 and 1960. The increase in population was brought about by increased lumbering activity and its reliance upon labor. Correspondingly, the decline, through a series of peaks and troughs, of the lumber industry and increased mechanization in timber production, resulted in the population decrease between 1960 and 1970.

The two major components of population change for any area are net migration and natural increase. Net migration represents the difference between the number of persons moving into an area and the number of persons moving away from the same area. A positive figure indicates an in-migration; a negative figure indicates an out-migration for the area. The components of population change were derived by using 1970 and 1960 Census counts and obtaining a net change in the population of each for the decade. Estimates of natural increase (births minus deaths) were based on vital statistics. Net migration was estimated by subtracting natural increase from the net population change. Net migration is expressed as a percentage of the 1960 population.

	Change 1960-1970		Components of Change		
	<u>Number</u>	<u>Percent</u>	Natural Increase	Net Migration	
			<u>Number</u>	<u>Number</u>	<u>Percent</u>
Del Norte County	-3,200	-18.0 %	2100	-5,300	-29.5 %

For the period April 1, 1970 (time of the census) to July 1, 1975, the Population Research Unit of the California Department of Finance produced the following population estimates:

July 1, 1975 civilian population estimate	15,500
Increase over 1970 population estimate	1,100
Percent change over 1970 population	7.6%
Births	1,400
Deaths	800
Net transfer between civilian and military status	100
Net migration	400 or + 2.78%

Population projections for the next 20 years are as follows on Table V:

Table V

DEL NORTE COUNTY POPULATION ESTIMATES
BASELINE PROJECTION*

	1975	1980	1985	1990	1995
DEL NORTE COUNTY	15,400	16,400	17,700	18,100	20,600
CRESCENT CITY	2,725	2,900	3,150	3,380	3,650
NORTH CRESCENT CITY TO WASHINGTON BOULEVARD	3,220	3,430	3,700	3,990	4,300
EAST OF CRESCENT CITY, SOUTH OF PARKWAY DRIVE	1,585	1,770	1,910	2,065	2,225
RAILROAD AVENUE AREA	1,065	1,215	1,310	1,413	1,524
NORTH OF WASHINGTON BOULEVARD TO LAKEVIEW DRIVE	1,265	1,345	1,450	1,565	1,690
KINGS VALLEY NORTH OF HWY 199, INCLUDING SOUTH BANK ROAD	370	395	425	460	495
NORTH OF ELK VALLEY CROSSROAD THROUGH FORT DICK	1,480	1,575	1,700	1,835	1,980
TOWN OF SMITH RIVER	680	720	780	840	900
NORTH AND SOUTH OF TOWN OF SMITH RIVER	770	900	975	1,050	1,135
HIOUCHI	325	345	370	400	430
GASQUET	415	440	480	515	555
KLAMATH AREA	1,125	1,200	1,290	1,390	1,500

Using the preceding population projections, estimates for the net number of housing units required to house this increased population can be made. The ratios between total population and numbers of housing units were computed from the 1970 census. The State Department of Finance suggests that the ratios used be slightly lower than 1970's to reflect the trend toward smaller households. Baseline population projections were used.

Housing Units Required Between 1970-1995

Year	Estimated Population Gain	Ratio of Population to Housing Units	Additional Required Number of Housing Units
1975	820	2.5	330
1980	1000	2.5	400
1985	1300	2.5	520
1990	1400	2.45	570
1995	1500	2.45	615

The above estimates for housing demand is only an approximation based on a projected population. Different estimates can be achieved by using the higher population projections. This estimate should be considered a conservative, or minimum demand. Factors not considered are obsolescence, demolition and vacancy rates.

Population Characteristics

According to the 1970 Census, 94% of the County's residents are white, 5% Indian and the 1% remainder are black and other ethnic groups. The Indian citizenry is primarily located in the Smith River, Crescent City and Klamath areas. Slightly over 39% of the County's total population is located within Crescent City (18%) and the area north of Crescent City to Washington Blvd. (21%), with 3/4 of the total County population being located on the Coastal Plain.

The median age of the County's population in 1970 was 29.2 years, slightly higher than the State's 28.4 years. The percentages of age groups is shown in Table VI. Approximately 61% of the County's population is over 20 years of age. Of all the age groups, only the 60 years and above and the 15-19 years age groupings have actually shown physical increases in size. Of the 60 and above age group, 38% are located in the Crescent City and the Crescent City north area. Other concentration of this age group are Smith River and Gasquet areas and the area east of Crescent City.

Table VI

Population Characteristics

	<u>1950</u>	<u>1960</u>	<u>1970</u>
Total Population	8076	17771	14580
White	7572 (94%)	17012 (96%)	13712 (94%)
Negro	7	27	34
Indian	499 (6%)	691 (4%)	727 (5%)
Other	----	41	107
Under 5 years	944 (12%)	2390 (13%)	1169 (8%)
5 through 14 years	1203 (15%)	3914 (22%)	3233 (22%)
15 through 19 years	508 (6%)	1280 (7%)	1327 (9%)
20 through 44 years	2893 (36%)	5890 (33%)	4232 (29%)
45 through 59 years	1453 (18%)	2698 (15%)	2558 (18%)
60 and above	1077 (13%)	1599 (9%)	2061 (14%)

People need a source of income to translate these housing needs into effective market demand. This source is usually paid employment. In 1970, the amount of unemployment (according to the 1970 Census) was 10.1%. The County's occupational profile differed from the State's profile in that the County has a higher employment rate in manufacturing and government and a lower rate in professional and sales. Residents' ability to afford housing is illustrated in Table VII. Most important from this table is that 34% of the families in the County in 1970 fell at or below the median gross rental rate.

Demand for low cost rentals has continued to exist in the County. The Crescent City Housing Authority, in January of 1976, had in its file the following applications for low cost housing:

- 247 applications for 1 bedroom units.
- 275 applications for 2 bedroom units.
- 217 applications for 3 bedroom units.
- 40 applications for 4 bedroom units.
- 11 applications for 5 bedroom units.

These applications were applications not filed and it is not known if these requests were filed by the individual seeking housing other than the housing authority.

In January, 1975, a survey was conducted with local realtors to determine current housing demand and costs. The information produced should be considered as generalities. The results were as follows:

Rental Costs

	Studio	1 bedroom	2 bedroom	3 bedroom	4 bedroom
Apartments	80	115	140	N/A	N/A
Home		100	145	180	225

Average number of inquiries per week seeking rentals - 15

Housing Sales on 6000 sq. ft. lot

	1 bedroom	2 bedroom	3 bedroom	4 bedroom
House	10,000	18,000	24,000	30,000

Average sale price of a 3 bedroom, 1 bath home on a 1 acre parcel --- \$35,000.00

Average sale of 1 acre unimproved

Smith River area	\$ 4,500.00
Fort Dick Area	4,500.00
Hiouchi and Gasquet	17,300.00
Klamath	N/A
Crescent City area	5,400.00

Cost of lots in Klamath area

Klamath Townsite	Starting at \$ 3,075.00
Redwood Park	3,300.00
Terwer area (1/3 acre)	7,500.00 (Av)
1 acre Hillside	11,000.00
Requa Hill - 1 acre	15,000.00

(This survey was conducted in January, a low volume month, although year-round figures were asked for, they are probably conservative estimates as compared to the same response in the higher volume summer market.)

This survey indicates an unsatisfied demand for rental housing, approximately the same as 1969, a slight increase in the continuing demand for homes and unimproved lots and a significant increase in the amounts paid. (1 acre of land up from \$1,000.00 per acre to about \$5,000.00 per acre. Hiouchi area up from \$4-7,000.00 per acre 1969 value, and houses and rentals up considerably.)

Mobility-Public Transportation

There is no public transportation available within the City, except for taxis and interstate travel by Greyhound Bus. This lack of public transportation makes it difficult for some of the residents within the Bertsch, Roosevelt, and Filkins Tract to travel to the available jobs within the City and industrial areas. Due to the far-flung character of employment centers within the County, mobility is a necessity for every person going to work within the County. It is not available to those who have limited income and need it the most.

Abandonment

Many dwelling units throughout the County which have inadequate mechanical and electrical systems and poor quality exterior construction have been abandoned by their occupants, many of whom have migrated out of the County. This neglect has accelerated the deterioration process.

Housing Constraints

The future need for housing is clear, especially for low and moderate income families. The reasons for lack of housing inventory to fulfill this need is complex.

Obstacles and constraints on housing production are everywhere in the building process. The rising cost of land and building sites, increased environmental regulations, building code requirements, rising interest rates, the absence of housing building programs would be a few of these constraints. Both public and private sectors must work together to help the building process. An examination of these housing constraints is investigated below.

Housing Industry Constraints

The housing industry has not technically advanced as rapidly as other growth industries. Building a house today is very similar to the way it was built 50 years ago. Reluctance to change by the builder, the union trades and market acceptability by the consumer have lead to increasing construction costs. New building materials and practices are available, but the smaller builder often lacks the capital and the technological resources to capitalize on these resources.

Cost and Availability of Land

Increased population pressures on developable lands cause the land prices to escalate to prices where it is no longer feasible to construct low and moderate income housing.

Financial Constraints

The money cost of housing is one of the most important issues facing residential construction. Building activity is guided by the rise and fall of the availability of money. In times of high interest rates, building activity declines and these changes in the money rate and the affect of additional interest on the low income home buyer forces him out of the housing market.

Institutional Constraints

Mortgage lenders have slowly responded to changing technological advances made by the housing industry. Their reluctance to finance housing that is different from traditional building techniques and styles continues the housing styles of the same old type. Lending policies and loan criteria tend to eliminate the availability of

loans for anyone who doesnot fit into their package. Private conventional lending is oriented to fulfilling only the housing needs of medium and high income households.

Insufficient Insurance Coverage

Both property insurance and mortgage insurance are often difficult to obtain for housing units located in poorer residential neighborhoods. This places an obstacle on the financing of new construction or rehabilitation of units in these areas and minimizes the incentives to property owners in the areas to improve their housing units.

Lack of Private Venture Capital

Before a builder can construct new housing or rehabilitate older units, a capital outlay is necessary to start the venture. Seed money costs are substantial and the money expended by the developer prior to obtaining financing from public or private institutions eliminates many sponsors of housing for low and moderate income from the building field.

Building Codes

Specifications for new housing construction are dictated by the local building codes. If these codes are not current with recent technological advances in the building industry and excessive construction costs and delays result in the building process.

Subdivision and Zoning Regulation

Setting forth how the land will be utilized, the design criteria for the structures and the lot design, these ordinances enact a rigidity that is sometimes detrimental to imaginative, creative new building processes, land use, and site design. Setback requirements, lack of housing type diversification, and many other requirements reflect on the ability to produce less inexpensive housing.

Property Taxes

This prime source of revenues for local governments often acts to the detriment of providing new and maintaining older low and moderate income housing. Tax procedures on older properties discourage home improvement and rehabilitation because of increased assessments. Increasing tax loads burden the elderly on fixed incomes and preclude lower income families from homeownership.

Housing Choice and Mobility Factors

The housing market fails to provide sufficient amounts of adequate housing for low income households. Upward mobility in housing is prevented through income deficiencies. The larger amounts of new single family dwellings in the County have not provided housing for lower and moderate income families. The rapid increase in mobile home living reflects a strong market for lower priced housing than

that which is currently being produced by conventional construction. The lack of significant multi-family units limits the housing opportunities for all in the County.

Lack of Adequate Funding of Federal Housing Programs

This constraint perhaps more than any other constrains the housing industry. The current lack of financial programs to assist in housing production has halted segments of building industry.

Lack of Supplementary Sources of State Housing Assistance

When federal funds are not available, organizations in California are not able to turn to a state housing agency as an alternate source of financing. In other states, funding or guaranteed assistance is available at the state level to supplement federal program funding.

Lack of County-wide Agency

There is no single agency responsible for studying, recommending and implementing plans for action to upgrade the condition and quality of existing houses throughout the entire County.

HOUSING OBJECTIVES

The General Plan for Del Norte County states as its housing goals to "Provide a wide variety of housing types for people in every age, income and status group in the community, in order that no basic need goes unmet. Maintain a quality of housing that will sustain human life in comfort and safety, at prices and rents within the capacity of all people to pay. Encourage the growth and stability of family life through better housing."

Related to these is the neighborhood quality goal: the conservation, rehabilitation and renewal of all residential areas throughout the County should be made a part of a continuing, on-going effort involving all of the County's residents.

With the housing problems as well as a relatively slow population growth factor in mind, the following housing objectives have been formulated. The most immediate objectives are:

Development of water and sewer facilities for the exclusively residential areas within the County.

Improvement or removal of substandard and abandoned dwelling units within the County. It is felt that many of these substandard or abandoned units represent a health hazard as well as a public nuisance to the citizens of Del Norte County. Assure relocation housing for people displaced by code enforcement or other public action.

Conservation of units beginning to deteriorate should be undertaken.

Other significant objectives for the next few years are:

Improve and secure the quality of existing and future neighborhoods;

Reduction of the remaining substandard housing in specific neighborhoods by a proposed number of units per year;

Construction of new homes in order to attract new people to the County and provide better housing to replace the dwellings which will be torn down;

Organize a local program to develop low-cost housing. Coordinate housing efforts of public and private agencies and utilize Federal and State Housing programs;

Provide housing which meets the specialized needs of the elderly;

Consideration of a program to attract a modular dwelling unit construction factory or center to Del Norte county;

Designation of those areas most desirable for and conducive to residential development;

Inclusion of all segments of the community in housing plans and programs. Citizen groups, profit and nonprofit organizations should be included to insure consideration of homes and apartments for all strata of the community.

Continued investigation into housing quality and quantity, the distribution of housing and the needs of the County's general population and specific minorities.

Housing Action Programs for Del Norte County

Based on projected population growth, the minimum net housing gain needed projected, for the County for each 5 year period is as follows:

1975.....	330 net housing units
1980.....	400 net housing units
1985.....	510 net housing units
1990.....	570 net housing units
1995.....	615 net housing units

Replacement of deteriorated or obsolete housing will increase the total number of housing units required but will not change the net housing figures. Replacement units are needed primarily in the low income families. New units are needed and retired people cannot afford high cost housing therefore any housing projects should give these two groups substantial consideration.

Size requirements vary. New families and retired persons generally occupy smaller units. Larger units are required by growing families, and there is a short supply of large units existing today in the County.

A list of programs and approaches to meeting Del Norte County's housing needs is spelled out here as part of the Housing Element:

Preparation of a five year overall program designed to improve the community's housing supply and quality with the net housing.

Survey of available housing aids, legislation and funds. Consider working for adoption of a state housing aid program.

Preparation of an action plan for the local Housing Authority. The only existing housing authority in the County is the City of Crescent City Housing Authority. Its jurisdiction includes other parts of the Planning Area by way of: Contract Cal-61, Section 23 leased Housing Department of Housing and Urban Development; and Resolution No. 69022, March 23, 1969, County of Del Norte, which authorizes the operation of the Housing Authority within a five mile radius of the City limits. Consideration could be given to expanding the jurisdiction of the Housing Authority to cover all of Del Norte County. Its name could be changed to the Housing Authority of the City of Crescent City and the County of Del Norte.

Study of available housing sites for low and moderate income housing sponsors and private development.

Seek federal assistance for housing Indian residents of the County. The "mutual self-help" housing program is proving successful in other areas and Indian reservations, and should be incorporated into Del Norte county housing plans. A good example is the accomplishment of the Colorado River Indian Reservation at Parker, Arizona. Other self-help programs are available for non-Indian groups as well.

Formulation and institution of a program for provision of utilities to outlying residential areas.

Creation of a joint City/County redevelopment agency to upgrade the Bertsch, Filkins and Roosevelt housing tracts.

Consideration of a program to upgrade dwelling units in the outlying areas of Crescent City under a General neighborhood Renewal Program. This could effect rehabilitation of much of the deteriorated housing in specific areas.

Work toward adoption of legislation equalizing the requirements of homeowners of both permanent and mobile units in regard to taxes, depreciation, zoning controls. The use of mobile homes should be permitted throughout the County provided that they carry an equitable share of the tax burden. Mobile homes should be located in accordance with sound zoning that assures the protection of property values for both permanent conventional dwellings and mobile homes. (See section on "Mobile Homes")

Inclusion of LAFCO (Local Agency Formation Commission) in any analysis of better governmental arrangements in outlying areas. Encourage consolidation consistent with the goals of the City and the County for better local government and provision of utilities and services to all urban areas.

Removal of dilapidated structures and abandoned vehicles at the earliest possible date to encourage rapid and orderly Countywide development. Development of necessary controls to alleviate the public nuisance of abandoned trailers as well as automobiles.

Determination and implementation of an action-oriented program to consolidate obsolete paper subdivisions all over the County. (See section on Subdivision Development Policy in this report.)

APPROACHES TO IMPROVING AND CREATING HOUSING IN DEL NORTE COUNTY

1. Alternatives to the High Cost of Housing

By far the largest obstacle to meeting the objectives of the Housing Element is the high cost of housing. A large proportion of families have been forced out of the housing market by current prices. The builder's actual costs have risen so sharply that most of them have abandoned the attempt to build low-cost housing because they cannot realize any profit on it.

Even if the inflationary trend of the economy is reversed, there is little optimism that conventional housing will become much less costly in the foreseeable future. Labor practices and costs have become rigid through union rules and contracts. Land costs are dearer as land becomes scarcer and certain locations become more desirable. The scarcity of land is not the major problem for Del Norte County, but provisions for adequate utilities to new developments as well as existing ones is a significant problem.

In order to provide adequate shelter for the County's population, alternatives to conventional housing must be investigated and evaluated. The most logical, mass-produced or prefabricated housing, is about to come of age. The greatest obstacle is the general opposition to factory construction by labor unions, but this is being overcome gradually. Prefabricated or sectional homes are standard sizes, and their builders claim their prices are 15% to 20% less than for houses of similar square footage built by conventional methods. As factory-built homes become more acceptable to homeowners as well as labor unions, the prices should decrease due to economics of scale achieved through expanded demand.

The second, and for this area the most available, alternative to conventional housing is mobile homes. The mobile home situation in regard to Del Norte County is discussed in a separate section. While mobile homes have become an important element in solving the County's housing problems, at least certain difficulties will have to be faced and resolved.

2. Conservation and Rehabilitation

Conservation and rehabilitation are important aspects of the housing work program. Although these approaches add no new units to the inventory, they can preserve units that are still sound and increase their useful life-span. Del Norte County has many units which are currently sound, but because of the weaknesses in their original construction, they depreciate rather rapidly and will need improvement in order to retain a sound condition.

Rehabilitation can be done either privately or through public programs, and is probably best accomplished with the cooperation of both. Neighborhood improvement undertaken or initiated by homeowners such as tree planting, school improvements, and small parks may stimulate private rehabilitation of homes. It can be generally that the scale of public investment required in a proposed rehabilitation area is inversely proportional to community interest in private voluntary rehabilitation.

A rehabilitation program raises a number of sticky questions: Can the improved housing still serve the same income group without subsidies? What provisions will be made for the relocatees? Will public rehabilitation results be sufficient to subsidize, or at least encourage, private rehabilitation? Despite these problems, rehabilitation has many strong points; among them are that it helps retain the identity of the community; it should cause a minimum of displacement; and it usually keeps housing costs lower than new construction on the same site. Given its present housing picture, Del Norte County should investigate the feasibility of implementing a voluntary program of housing conservation and rehabilitation in many parts of the County. It can also apply for government assistance in such a venture.

To have a feasible program for home improvement and construction at minimum cost, the program must stimulate voluntary acceptance of standards to be attained and offer incentives to owners. It may be profitable from several points in building their own homes (much as the "mutual self-help" programs). To assure good quality, building codes should be enforced, but they should not be so rigid as to discourage construction almost entirely. In addition, building codes and regulations should be related to contemporary building technology including prefabrication and modular housing.

3. Housing Programs

Over the years, there has been a multitude of housing programs created primarily by the federal government to ease and correct the housing shortage. Currently, there is a freeze on many of the programs, while studies are being conducted by the federal government to analyze the impacts and costs of the programs. The federal government is re-focusing from handling housing problems through Washington to handling and solving problems through the actions and programs of state and local governments.

Public Housing

One of the largest and oldest programs has always been called simply "public" housing. A local housing authority builds or leases housing units then rents them to low-income families. The federal government sometimes loans to the local authority the funds to cover construction costs.

Conventional Low Income Housing

In this case the federal government acts as a lending agency to the local housing authorities. Money is loaned to the authorities to buy land, hire an architect and get under construction. At the time of 90% completion the authority advertises on the open market and sells bonds at the best obtainable interest rate. The federal government guarantees the payments to bond holders. The local authority repays the federal loan when all bonds are paid off, usually after 35 or 40 years.

Conventional housing is owned and operated by the housing agency and is more or less self-supporting. The agency is exempt from local taxes. Recognizing the need of residents for schools, police and fire protection and other public services, the agency agrees to pay 10% of shelter rent less utilities in place of taxes.

There are to be eligible for admission to the HUD-aided housing units operated by the authority only those applicants:

1. Who qualify as a family.
2. Whose net family income, less an exemption of all amounts paid by the U.S. Government for disability or death occurring in connection with military service, does not exceed the applicable income limit for admission.
3. Who are:
 - a. Actually without housing.
 - b. To be displaced or otherwise about to be without housing.
 - c. Living in dwellings determined to be unsafe, unsanitary, or overcrowded, or
 - d. Paying a gross rent which is \$20.00 or more higher per month than required by the schedule:
Provided that the requirements contained in this paragraph 3 shall not be applicable in the case of a family of any veteran or serviceman or an Elderly Family.
4. Who conform to the occupancy standards for admission; and
5. Whose net family assets do not exceed \$5,000 (\$10,000 for Elderly), unless such assets, together with the net income of the family, are insufficient for it to obtain and maintain adequate accommodations on the private market.

Maximum Net Family Income

<u>Family Composition</u>	<u>Admission</u>	<u>Continued Occupancy</u>
One person	\$3,400	\$4,250
Two persons	3,800	4,750
Three persons	4,200	5,250
Four persons	4,600	6,250
Five persons	5,000	6,500
Six persons	5,200	6,500
Seven persons	5,400	6,700
Eight persons or more	5,600	7,000

Net Family Income

"Net Family Income" means "Total Family Income" less deductions specified below and anticipated during the twelve month period for which Total Family Income is estimated. Such deductions are to be applied uniformly to all families as applicable.

- 1) A deduction of five percent of Total Family Income except that the deduction shall be ten percent in the case of a family whose head or spouse is elderly. Either head or spouse must be 62 years of age or over, or disabled or handicapped.
- 2) A deduction for extraordinary medical expenses where not compensated for or covered by insurance, defined for this purpose to mean medical expenses in excess of three percent of Total Family Income.
- 3) A deduction of amounts for unusual occupational expenses not compensated for by the employer, such as special tools and equipment, but only to the extent by which such expenses exceed normal and usual expenses incidental to employment.
- 4) A deduction of amounts paid by the family for the care of children or sick or incapacitated family members when determined to be necessary to employment of the head or spouse, provided the amount deducted does not exceed the amount of income received by the family member thus released.
- 5) An exemption of \$300 for each dependent, or, each minor (other than the head or spouse) and for each adult (other than the head or spouse) dependent upon the family for support.
- 6) An exemption of \$300 for each secondary wage earner. (A family member deemed to be a dependent under (1) above is not to be included.)

Leased Public Housing

The Crescent City Housing Authority uses this program to provide low-cost housing to County residents. The Authority currently manages 73 houses within a 5 mile radius of Crescent City or within the City itself.

The housing authority leases moderately priced units located throughout the County and then subleases the units to qualified tenants. The tenant's gross rent is 25% of the family income before taxes and the difference is provided by the Federal government.

The housing authority and the owners of housing units usually sign one-to-five year leases. In some cases, the lease period may be extended.

The leased housing program is attractive for several reasons. Housing units are owned by the private sector and thus remain on the property tax rolls. Landlords are assured of tenants. The landlord handles normal maintenance and even tenant selection if they choose to. The leased units and their residents are scattered throughout the community.

Other Housing Programs

Various subsidy programs designed to assist low and moderate income families in obtaining housing have been developed. Most widely used have been the Federal 236, 221(d)3, and the 235 program.

The Federal Housing Administration's 236 program provides reduced interest payment for families of low and moderate income.

The 235 program subsidizes mortgage insurance for home ownership.

Another Federal program utilized to provide moderate cost rental housing is the 207 program. Although not strictly subsidized, this program does provide developers with insured loans for developing moderate rental housing and for mobilehome parks. The loans are now administered through HUD.

Farmers Home Administration

The Farmers Home Administration makes loans in rural areas to finance homes, building sites, and essential farm service buildings. Rural areas include open country and places with populations of not more than 10,000 persons and are rural in character and not closely associated with urban areas.

Emphasis of programs is on new construction and housing can be built on individual lots or in subdivisions. Loans of this type are referred to as 502 loans.

Home ownership financing is available to low and moderate income families must:

- 1) Be without decent, safe and sanitary housing, or necessary farm service buildings.
- 2) Be unable to obtain a loan from private lenders on terms and conditions that they can reasonably be expected to meet.

- 3) Have sufficient income to pay house payments, insurance premiums and taxes and maintenance, other debts and necessary living expenses. Persons with inadequate repayment ability may obtain co-signers for the loan.
- 4) Possessthe character, ability and experience to meet loan obligations.

Loan terms can be made for the value of the site, house and improvements based on an FHA appraisal. The maximum repayment period is 33 years.

Length of loan - 33 years

Interest rate - 7-1/4%

Cash down - None

Monthly payments are tailored to give extra help to low and moderate income families to buy their own homes. When the financial position of the family improves to the point that it can refinance through a commercial lender, the loan contract provides that the family shall do so.

A moderate income family is defined beyond the above four points as one with an adjusted gross income of \$8,800 or less.

A P P E N D I X

TRAVEL TRAILER AND MOBILEHOME PARKS
December, 1975

<u>Name</u>	<u>Address</u>	<u>Location</u>	<u>Total</u>	<u>Ind</u>	<u>Dep</u>	<u>Other</u>
CAMP MARIGOLD	P. O. Box 526 Klamath, CA 95548	3 Mi. North of Klamath	40	20	20	--
SHIP-A-SHORE	P. O. Box 75 Smith River, CA 95567	North of Smith River	272	262	10	--
PINE GROVE	Rt. 1, Box B Crescent City, CA 95531	Lake Earl Drive Crescent City	17	17	--	--
TRAIL'S END	P. O. Box 299 Smith River, CA 95567	Sarina Road Smith River	30	30	--	--
HIGH PRAIRIE	Star Route, Box 583 Klamath, CA 95548	Hwy 101 North Klamath	70	50	20	--
KAMP KLAMATH	P. O. Box 128 Klamath, CA 95548	Hwy 101 North Klamath	77	45	32	--
PANTHER CREEK LODGE	Star Route, Box 660 Klamath, CA 95548	Mouth of Panther Creek Requa	35	35	--	--
NORTHCREST TRAILER CITY	1950 Northcrest Drive Crescent City, CA 95531	1950 Northcrest Drive Crescent City	62	62	--	--
CHUBS CAMP	Star Route, Box 600 Klamath, CA 95548	Mouth of Klamath	97	45	42	10
BONDY CREEK	P. O. Box 369 Smith River, CA 95567	Smith River	40	40	--	--
SHANGRI-LA	P. O. Box 97 Crescent City, CA 95531	Hwy 101 North Crescent City	79	79	--	--
DAD'S CAMP	611 Inyo Street Crescent City, CA 95531	Mouth of Klamath	30	--	30	--
SYNNY'S CAMP	Star Route, Box 500 Crescent City, CA 95531	Hwy 199 Gasquet	21	21	--	--
BUTTE MOBILEHOME PARK	701 E. Washington Blvd Crescent City, CA 95531	1010 Butte Street Crescent City	13	13	--	--
TENNER CAMP	Star Route, Box 260 Klamath, CA 95548	Klamath Glen	87	27	60	--
VILLAGE OF GASQUET	P. O. Box 23 Gasquet, CA 95543	Gasquet	18	18	--	--
PANORAMIC	Rt. 2, Box 1230 Smith River, CA 95567	Hwy 101 North Smith River	16	18	--	--
SALMON HARBOR	Rt. 2, Box 1277 Smith River, CA 95567	Mouth of Smith River	87	87	--	--
CHINOOK TRAILER RESORT	P. O. Box 7 Klamath, CA 95548	Hwy 101 North Klamath	68	61	7	--
NOMAD TRAILER PARK	P. O. Box 474 Smith River, CA 95567	Hwy 101 South Smith River	22	22	--	--
RIFFLES TRAILER PARK	P. O. Box 127 Klamath, CA 95548	Klamath Glen	44	20	24	--
KLAMATH GLEN RESORT	P. O. Box 68 Klamath, CA 95548	Klamath Glen	108	78	20	10
CIRCLE S RANCH	1525 Northcrest Drive Crescent City, CA 95531	1525 Northcrest Drive Crescent City	67	67	--	--
TEQUA BOAT DOCK	P. O. Box 5 Klamath, CA 95548	Requa	55	35	20	--
EL CAPITAN TRAILER PARK	1290 Elk Valley Road Crescent City, CA 95531	Elk Valley Road Crescent City	14	14	--	--
BOB STEEL'S LODGE	Star Route, Box 110 Klamath, CA 95548	Klamath	43	43	--	--
KLAMATH RIVERSIDE	P. O. Box 565 Klamath, CA 95548	Klamath	88	88	--	--
BUD'S COURT	P. O. Box 608 Klamath, CA 95548	Klamath Glen	8	8	--	--
KING SALMON	P. O. Box 327 Klamath, CA 95548	Klamath	30	19	--	11
MOORE'S MOORING	1811 Northcrest Drive Crescent City, CA 95531	Northcrest Drive Crescent City	43	43	--	--
CRASHER'S TRAILER PARK	2051 Northcrest Drive Crescent City, CA 95531	Northcrest Drive Crescent City	35	35	--	--
BLACKBERRY PATCH	P. O. Box 396 Klamath, CA 95548	Klamath Glen	31	31	--	--
AUGUST'S PLACE	3375 Somerset Avenue Castro Valley, CA	Elk Valley Road Crescent City	7	7	--	--
STAR	Star Route, Box 488 Klamath, CA 95548	Tenover	35	35	--	--

<u>Name</u>	<u>Address</u>	<u>Location</u>	<u>Total</u>	<u>Ind</u>	<u>Dep</u>	<u>Other</u>
DEL'S CAMP	Star Route, Box 710 Klamath, CA 95548	Klamath	52	27	25	--
*OLD CROW	P. O. Box 204 Klamath, CA 95548	Hwy 101 North Klamath	2	2	--	--
FORTAIN TRAILER COURT	Star Route, Box 625 Klamath, CA 95548	Hwy 101 North Klamath	22	10	--	12
*EDWARDS	P. O. Box 122 Smith River, CA 95567	4th Street Smith River	3	3	--	--
CAMP LINCOLN KOA	Rt. 2, Box 117-A Crescent City, CA 95531	Hwy 101 North Crescent City	94	21	21	52
*GARY'S	1901 Northcrest Drive Crescent City, CA 95531	Northcrest Drive Crescent City	2	2	--	--
*OLD HOMESTEAD	P. O. Box 265 Klamath, CA 95548	4 Mi. North of Klamath	2	2	--	--
*FIRSICKS	Rt. 2, Box 1203 Smith River, CA 95567	North of Smith River	1	1	--	--
*SANDERS	Star Route, Box 611 Klamath, CA 95548	Hwy 101 North Klamath	2	2	--	--
RECREATION TRAILER PARK	Star Route, Box 67 Klamath, CA 95548	Klamath Glen	60	20	--	40
*TOWN AND COUNTRY	2331 Old Mill Road Crescent City, CA 95531	Old Mill Road Crescent City	4	4	--	--
*HUNTER CREEK	P. O. Box 427 Klamath, CA 95548	Hunter Creek Road Klamath	1	1	--	--
*BROWN'S	877 "C" Street Crescent City, CA 95531	3 Mi. North Hwy 101 Crescent City	2	2	--	--
*CHALET	6081 Claremont Avenue Oakland, CA	Klamath Glen	1	1	--	--
MOUNTAIN VIEW	836 Third Street Crescent City, CA 95531	Gasquet	24	24	--	--
HOMESTEAD PARK	Rt. 2, Box 1122 Crescent City, CA 95531	Hwy 101 (1/4 Mi. North of Kings Valley Road Crescent City	49	--	43	6
*JORDAN CREEK	214 E. Carter Rialto, CA	Lake Earl Drive	1	1	--	--
*HAMMER'S	Rt. 2, Box 1220 Smith River, CA 95567	Smith River	1	1	--	--
*MORROW'S	Star Route, Box 392 Klamath, CA 95548	Klamath	2	2	--	--
VILLAGE CAMPER INN	Rt. 2, Box 33 Crescent City, CA 95531	Parkway Drive Crescent City	29	11	18	--
*LUIS'	Star Route, Box 62 Klamath, CA 95548	Klamath Glen	1	1	--	--
*SANDY'S	1178 Huntington Crescent City, CA 95531	Lake Earl Drive	1	1	--	--
WIGWAM		Hwy 101 North Klamath	37	37	--	--
*WEAVER'S	Star Route, Box 488 Klamath, CA 95548	Klamath Glen	1	1	--	--
*BROKEN TEE RANCH	P. O. Box 339 Klamath, CA 95548	North of Klamath	1	1	--	--
*B & B	12532 S. Lakewood Downey, CA	Klamath Glen	2	2	--	--
SPORTSMAN	P. O. Box 656 Klamath, CA 95548	Klamath Beach Road Klamath	68	68	--	--
KLAMATH BEACH	P. O. Box 38 Klamath, CA 95548	Klamath Beach Road Klamath	45	--	20	25
PELICAN BEACH	Rt. 2, Box 1206 Smith River, CA 95567	Hwy 101 North Smith River	5	5	--	--
*ROCK CREEK RANCH	P. O. Box 607 Crescent City, CA 95531	Big Flat Road	1	1	--	--
SHORELINE CAMPGROUND	900 Sunset Circle Crescent City, CA 95531	Beach Front Crescent City	129	29	100	--
VALLEY VIEW	Rt. 2, Box 1295 Smith River, CA 95567	Hwy 101 North Smith River	47	7	40	--
KLAMATH CAMPER CORRAL	P. O. Box 35 Klamath, CA 95548	Klamath	100	55	22	23
*PARADISE COURT	Rt. 2, Box 2 Crescent City, CA 95531	Hwy 101 North Crescent City	2	2	--	--
*CRIVELLI'S GLEN	Star Route, Box 66 Klamath, CA 95548	Klamath Glen	31	2	29	--

<u>Name</u>	<u>Address</u>	<u>Location</u>	<u>Total</u>	<u>Ind</u>	<u>Dep</u>	<u>Other</u>
HUNTER'S CAMPGROUND	Rt. 2, Box 1173A Smith River, CA 95567	Smith River	8	3	--	--
WADKONE COURT	Rt. 2, Box 392 Crescent City, CA 95531	Hiouchi	23	23	--	--
*RUTH'S SPRUCE	Rt. 2, Box 1182 Smith River, CA 95567	Ocean View Drive Smith River	3	3	--	--
GREEN DOLPHIN	Rt. 2, Box 1294 Smith River, CA 95567	Hwy 101 North Smith River	11	11	--	--
*R & M	Rt. 1, Box 186 Crescent City, CA 95531	Malone Road Crescent City	1	1	--	--
*CAULSON'S	P. O. Box 352 Crescent City, CA 95531	Wonder Stump Road Crescent City	1	1	--	--
*AL SHEDD	Rt. 1, Box 400C Crescent City, CA 95531	South Bank Road	2	2	--	--
*GEORGE FULLER	360 E. Madison Crescent City, CA 95531	360 E. Madison Crescent City	4	4	--	--
*TOWE & HARRISON	1281 Huntington Street Crescent City, CA 95531	Kings Valley Road Crescent City	50	50	--	--
*HARP	P. O. Box 232 Crescent City, CA 95531	1492 Northcrest Drive Crescent City	1	1	--	--
WILDERNESS	P. O. Box 388 Klamath, CA 95548	Klamath	67	--	67	--
*DAVEY	2329 Parkway Drive Crescent City, CA 95531	Crescent City	1	1	--	--
*CANFIELD	2790 Alder Road Crescent City, CA 95531	Alder Road Crescent City	1	1	--	--
KING SALMON	P. O. Box 327 Klamath, CA 95548	New Klamath Townsite	20	20	--	--
*PEPPER TREE	Rt. 1, Box 459 Crescent City, CA 95531	Kings Valley Road Crescent City	1	1	--	--
*LUND	Star Route, Box 613 Klamath, CA 95531	Klamath	1	1	--	--
CHANTICLEER	P. O. Box 503 Crescent City, CA 95531	1775 Northcrest Drive Crescent City	12	12	--	--
*SHELDON	2761 Quimby Road Crescent City, CA 95531	Hiouchi	1	1	--	--
*BEN WIGLEY	Rt. 1, Box 200G Crescent City, CA 95531	Movie Lane (off Elk Valley Crossroad) Crescent City	2	2	--	--
*CAROLS	1375 Parkway Drive Crescent City, CA 95531	Parkway Drive Crescent City	1	1	--	--
*OWENS	P. O. Box 122 Gasquet, CA 95543	Gasquet Flat Road Gasquet	1	1	--	--
*BAXTER	203 La Ventura Mt. Vernon, WA	Hwy 101 and Kings Valley Road Crescent City	1	1	--	--
TOTALS			2,829	1,970	670	189

*Denotes Mobilehome Parks of less than five (5) spaces or that originated with less than five (5) spaces.

MAJOR FEDERAL HOUSING ASSISTANCE PROGRAMS

OFFICIAL PROGRAM TITLE	TENURE	ORIGIN OF STRUCTURE	OCCUPANT GROUP	TYPE AND LEVEL OF SUBSIDY	ELIGIBLE SPONSOR	FEDERAL AGENCY RESPONSIBLE	REMARKS
PUBLIC HOUSING (LOW RENT)	RENTAL (SALE ALSO POSSIBLE)	NEW, EXISTING, REHABILITATED	LOWEST INCOME	Annual grant to pay interest and principal to meet payment on bonds for entire construction cost plus additional grant to reduce rent to 25% of any tenant's income	Local Housing Authority (LHA)	HUD/Housing Assistance Administrator	LHA may sell units to tenants on extended low cost terms LHA may subcontract with private firm to develop project on a "turnkey" basis.
RENT SUPPLEMENT	RENTAL OR COOPERATIVE	NEW OR REHABILITATED	LOWEST INCOME	Grant to reduce rent to 25% of tenant's income but not to reduce rent to below 30% of market rent	Nonprofit, profit, or cooperative corporation	HUD/Federal Housing Administration	Local gov. approval required. Limited to persons relocated or residents of sub-standard housing
RENT SUPPLEMENT COMBINATION	RENTAL OR CO-OPERATIVE	NEW OR REHABILITATED	LOWEST INCOME	Grant to reduce rent to 25% of tenant's income but not to reduce rent to below 30% of market rent	Nonprofit, profit, or cooperative corporation	HUD/Federal Housing Administration	Rent Supplements are frequently combined with other % up to 40% of total
236 RENTAL HOUSING FOR LOWER INCOME FAMILIES	RENTAL OR CO-OPERATIVE	NEW OR REHABILITATED	LOW AND MODERATE	Annual grant to reduce interest cost. Rents lowered to 25% of income but no lower than cost at 1% interest	Nonprofit, profit, or cooperative corporation	HUD/Federal Housing Administration	Available in rural areas through the FmHA
221(d)3 RENTAL HOUSING FOR LOW AND MODERATE INCOME FAMILIES	RENTAL OR CO-OPERATIVE	NEW OR REHABILITATED	LOW AND MODERATE	Federal purchase of private loan by GNMA to reduce interest cost to 3%	Nonprofit, profit, or cooperative corporation	HUD Federal Housing Administration	Program is being phased out, new projects limited to those now in FHA processing
202 RENTAL HOUSING FOR ELDERLY AND HANDICAPPED	RENTAL	NEW OR REHABILITATED	LOW AND MODERATE	Direct Federal loan at 3% interest	Nonprofit profit or cooperative corporation	HUD Federal Housing Administration	Program may be phased out, no new loan available at this time
515/521 RURAL RENTAL HOUSING LOANS	RENTAL	NEW, EXISTING OR REHABILITATED	RURAL LOWEST TO MODERATE	Direct Federal loan or insured loan at 6 1/4% interest. For lowest income, interest reduction to reduce rent to 25% of tenant income but no lower than 1% interest	Nonprofit profit motivated or cooperative corporation	Agriculture Farmers Home Administration (FmHA)	Available only in small urban areas with less than 5,000 population or rural area

CHART KEY:

Official Program Title: Each program is known by a short title or a number. The number refers to the section of the Act of Congress which authorized the program. For example, "Public Housing" means "Low Rent Public Housing." "235" means "Section 235 of the National Housing Act", or, as it is officially termed by HUD, "Home Ownership for Lower Income Families."

Tenure: Each Federal program is authorized to support a certain type of tenure of occupancy, basically renter or owner. Generally, rental programs can also provide for cooperative ownership. Mobile homes are a special combination because the mobile home space is provided on a rental basis to the occupant who generally owns the mobile home.

Target Occupant and Income Range: Federal Housing Programs are generally restricted to families, the elderly, handicapped, and displaced from public improvement projects. Programs generally serve a designated income group such as "low and moderate" or "lower" income families. In actuality, the income spectrum served is determined by the maximum family income ceiling and the minimum income required to pay the lowest rent possible under the program.

OFFICIAL PROGRAM TITLE	TENURE	ORIGIN OF STRUCTURE	OCCUPANT GROUP	TYPE AND LEVEL OF SUBSIDY	ELIGIBLE SPONSOR	FEDERAL AGENCY RESPONSIBLE	REMARKS
221(d)4 RENTAL HOUSING MARKET INTEREST RATE	RENTAL	NEW OR REHABILITATED	MODERATE INCOME	No monetary subsidy Assisted only by Federal loan guarantee at more liberal terms	Profit-motivated or cooperative corporation	HUD Federal Housing Administration	221(d)3 also available at market interest rates
235(i) HOME OWNERSHIP FOR LOWER INCOME FAMILIES	OWNERSHIP	NEW EXISTING OR REHABILITATED	LOWEST TO MODERATE	Annual grant to reduce interest cost House payments lowered to 20% of income but no lower than cost at 1% interest	Profit-Motivated Seller	HUD Federal Housing Administration	85% must be new construction 15% for existing or rehab are available to lowest income group
502 521 RURAL HOUSING LOANS LOW TO MODERATE INCOME	OWNERSHIP	NEW, EXISTING OR REHABILITATED	RURAL LOWEST MODERATE INCOME	Direct Federal loan or insured loan at 6 1/4% interest For lowest income, interest reduction to reduce payment to 20% of owner's income	Profit-motivated Seller	Agriculture Farmers Home Administration (FmHA) and	Available only in small urban areas with less than 5 500 population or rural area
235(j) HOME OWNERSHIP REHABILITATION	OWNERSHIP	REHABILITATED	LOWEST INCOME	Annual grant to reduce interest cost House payments lowered to 20% of income but no lower than cost at 1% interest rate	Non-profit corporation	HUD Federal Housing Administration	Replaces 221(h) a program with similar provisions
115 HOME OWNERSHIP REHABILITATION	OWNERSHIP	REHABILITATED	LOWEST INCOME HOME-OWNER	Federal grant for a maximum of \$3 500 Available to families below \$3 000 income and higher income in amount necessary to reduce payment on a 312 loan to 25% of income	Urban renewal agencies	HUD Renewal Assistance Administration	Usually only available in urban renewal and concentrated code enforcement areas Often combined with 312 loan
312 URBAN RENEWAL REHABILITATION LOANS	OWNER OR RENTAL	REHABILITATED	LOWEST TO MODERATE INCOME	Direct Federal loan at 3% interest 115 grant available in amount needed to reduce monthly housing cost to 25% of income	Urban renewal agencies	HUD Renewal Assistance Administration	Usually only available in urban renewal and concentrated code enforcement areas May be used to refinance prior debts Often combined with 115 grant
207 MOBILE HOME COURTS	RENTAL (LAND ONLY)	NEW	MODERATE	No monetary subsidy Assisted by Federal guarantee of private loan	Profit-motivated corporation	HUD Federal Housing Administration	Loan for mobile home space only Resident rents space and buys mobile home

Courtesy of Mid-America Regional Council

Type and Level of Subsidy: There are several techniques of subsidy under Federal housing programs. Some programs such as 235 and 236 provide a variable subsidy formula which adjusts the amount of subsidy to reduce rent to a specified percentage of income.

Eligible Sponsor: The Federal government does not develop and own housing units except in limited instances such as defense installations. Each particular Federal housing program has specified types of organizations which are eligible to own units. For example, under 221 (d) 3 units may be owned by a profit-motivated, nonprofit, or cooperative corporation. The profit-motivated corporation must be a "limited-dividend" type which can earn no more than a six percent profit.

Federal Agency Responsible: Responsibility for Federal housing programs is divided between the Department of Housing and Urban Development, Department of Agriculture and the Veterans Administration.

Direct Housing Assistance - An Experimental Program

The Department of Housing and Urban Development has launched a new research program to evaluate the concept of channeling federal assistance directly to families in need of housing instead of through organizations in the business of providing housing.

The experimental program will produce information upon which to base key decisions: first, the decision as to whether the direct assistance approach is in fact a tenable one; and decisions as to how and in what form the direct assistance can best be administered.

Under the concept to be tested, direct payments will be made available to families in need. The families may canvass the market to select housing of their choice. Because the payments are made to a family instead of being attached to a specific housing unit, they will follow a family that moves from one unit to another so long as its income is so low as to require assistance. This direct form of housing assistance expands a family's housing choice and provides for its free movement in the housing market.

This research effort is designed to determine whether it is desirable to add a new element to the range of housing subsidy programs now available or to adjust existing programs. The present system of subsidies tied exclusively to specific housing units may not be the most effective means of providing for the shelter needs of America's lower income families. This system has some weaknesses in terms of both cost and equity, and there are difficulties in administering programs that identify particular buildings or houses as "poor people's housing". The housing allowance, which permits the recipient to shop for housing throughout the entire market, and permits a degree of anonymity, appears potentially to have significant advantages.

Research of this type is authorized by the Housing Act of 1970, and the experimental program that has emerged from a year-long design effort has been approved by the Secretary of Housing and Urban Development. The experiment will be conducted as a part of the Housing Assistance Research Program under the direction of the Assistant Secretary for Research and Technology.

The direct assistance approach is not a new idea. What is new is the idea of a detailed, methodical research effort to determine the values -- pro and con -- of such an approach and to test alternative administrative mechanisms for initiating a full scale national program.

Housing allowances provide purchasing power directly to the housing consumer, who decides where in the total housing market, of both new and existing units, to apply it. A housing allowance system thus offers the opportunity for the free market to operate in its traditional fashion. Widespread distribution of housing allowances to poor families should reduce the economic dependence on slum housing and shift the demand upward for standard units. In response to this shift in demand, suppliers of housing would be induced to produce more standard housing, either by upgrading slum properties or through new construction. Thus a housing allowance program should bring about, indirectly, the gradual elimination of slums and a general increase in the quality of the housing stock. In order to accelerate the effects of housing allowances on the removal of slums, it is imperative that their use be restricted to units of standard quality. Owners of slums would then have to upgrade or find it difficult to rent their apartments.

A housing allowance system appears to have several potential advantages. It would permit the consumer to make his own choices in the market place, a freedom which tends to enhance personal dignity. By relying on market forces, it should bring about a better matching of consumer demands and housing supply. Low income consumers would make their own decisions on location and housing style rather than having others make these decisions for them. The project subsidy programs are now largely insulated from the healthy influences of market forces. In addition, by allowing recipients of housing assistance to make their own decisions on location, public controversy over the location of subsidized projects would be avoided. Distribution of the benefits of housing allowances could be made more equitably than is possible under project subsidy programs. Lastly, it is possible, though not certain, that a housing allowance approach would eliminate administrative processing of projects and would involve lower administrative expenses for government than do the present project subsidy programs.

Experimenting with this project in California is the San Bernardino Housing Authority. This local agency will be responsible for selecting eligible families and individuals and making payments to them, as well as arranging for counseling and code inspection where appropriate.

The Housing Development Corporation - The Private Sector Counterpart

A Housing Development Corporation (HDC) is the principal private sector counterpart of a Regional Housing Authority. Its basic capabilities include (1) providing "seed" money and technical assistance services to non-profit, limited dividend and for-profit sponsors of low and moderate income housing; and (2) directly sponsoring, either by itself or in partnership with other groups, development of low and moderate income units.

Whether it serves as a catalyst for private developers/sponsors, or directly undertakes housing development, an HDC utilizes the private (not public) housing programs of the Federal Housing Administration (FHA). These include Section 236 rental, Section 235 home ownership and rehabilitation, and Section 202 elderly.

Although it could operate independently of a housing authority, its greatest usefulness would be as a part of an integrated and comprehensive housing effort - especially by promoting Section 236, 235, and 202 development and then leasing back the new housing units to the Authority which would administer them under the Turnkey program.

An HDC, then, is a multi-purpose creature of the private sector taking form as a private non-profit corporation under the direction of a board of directors. Its board of directors typically includes equal representation from community groups, businessmen, and government officials.

The HDC as Catalyst - Technical Assistance and Seed Money

The HDC is unique among the various kinds of nonprofit organizations in that it can (1) directly sponsor and develop low and moderate income housing, (2) assist other groups by providing technical assistance and seed money, or (3) some combination of both. Depending on the nature of the local housing problem and the adequacy of their capitalization and expertise, some HDC's have chosen to emphasize the production (sponsor) function while others have concentrated on catalyzing other nonlimited or for-profit groups by providing technical assistance and seed money.

The kinds of technical assistance an HDC can provide both nonprofit and for-profit sponsors include:

- * Recruiting, motivating, and organizing non-and for-profit sponsors.
- * Market Analysis.
- * Program selection.
- * Selecting and training the development team which will provide the required legal, architectural, construction, and financial expertise.
- * Providing financing during the development, construction, and permanent loan stages of each project.
- * Selecting and acquiring the site.
- * Project design.
- * Processing the mortgage application(s).
- * Social planning.
- * Housing construction and rehabilitation.
- * Housing management.
- * Affiliating with the local housing authority for developing and/or leasing back low income housing under Section 23 and Turnkey public housing programs.

The Nonprofit Sponsor - A nonprofit sponsor is a charitable organization such as a church or community organization, that has organized a separate nonprofit corporation under the California Corporations Code and the Federal Internal Revenue Code.

Assisting the Profit-Motivated Sponsor - A profit-motivated sponsor is typically an investor, building contractor, trust corporation or other business organization seeking to make profits on a capital investment and to distribute these profits to private shareholders, partners or others. The for-profit sponsor's primary motivation is making money under the FHA 236, 235, or 202 programs; remedying low income housing problems is a secondary motivation of this class of investor.

Credit Counseling - An HDC's technical assistance role is not limited, however, to non- and for-profit sponsors/developers. It can also provide such useful services as credit counseling and community education. A credit counseling program would assist those families with poor credit ratings or no previous homeownership experience in securing FHA insured home mortgages.

Seed Money and Other Financial Stimulants - Another critically important function for an HDC is providing nonprofit and for-profit sponsors with preconstruction seed money, advanced by the HDC's revolving loan fund, to cover their initial costs such as fees of architects, attorneys and engineers, site options, organizational expenses, and application fees for FHA initial closing of multi-family projects or at the sale of single family houses of other projects.

Mortgage Pool - An HDC organized mortgage pool, in which banks, savings and loan associations, and other major lending institutions, pledge construction and rehabilitation loans on low income projects, has proven to be a major housing development stimulant elsewhere in the nation. The HDC role would be to encourage more aggressive activity by mortgage lenders by allaying fears of high processing and servicing costs, profitability, and inadequate credit counseling of low income families.

Land Banking - HDC land banking entails the purchase and holding of land or properties to facilitate the flexible scheduling of construction or rehabilitation at some time in the future. A realistic land banking fund is based upon the budgeting of average land and dilapidated property acquisition costs, turnover of the land and properties within 12-18 months of acquisition, and recapture of the acquisition outlays for new purchases. A well-planned land bank then would aim for a continuing cycle of acquisition, holding, resale, and reinvestment in land and properties every 12-18 months.

Land Write-Downs - Land write-downs are a method of subsidizing land (or property) costs in which the HDC sells the land (or property) at less than its cost of acquisition. Since land costs may frequently impose a barrier to feasible nonprofit or for-profit housing development and rehabilitation, the write-down strategy, in effect, is a project subsidy provided by the HDC to the low income housing sponsor.

Self-Help Housing

Another interesting, provocative housing program based on sweat equity and the premise that if you built it yourself, you should know how to maintain it is the Rural California Housing Corporation's Self-Help Housing Program.

The Rural California Housing Corporation (RCHC) is a federally funded program in Northern California that brings self-help housing to low income rural families who could not hope to finance homes through conventional loans. Self-help housing means people working together to help each other build better homes. RCHC is there with technical help from the formation of the housing groups until the homes are finished - and even after.

To build a home, a family must work or live in a rural community, be without adequate housing, have the ability to repay the loan, and be willing to work with a group and receive technical assistance.

Qualifying families receive low interest, long-term loans from the Farmers Home Administration (FmHA). Through the sweat equity of doing most of the work themselves, families reduce the usual construction costs. Their loans are repaid over a 33 year period. The monthly payments are figures at a percentage of the total family income - usually \$40 to \$60 per month (plus utilities, taxes and insurance).

RCHC helps by recruiting families and preparing loan applications, leading pre-construction classes, locating building sites and helping in the selection of plans, estimating costs for building materials, showing how to prepare and keep records, and supervising on-site construction techniques.

The sizes of the houses range from 2 to 5 bedrooms (900 - 1,200 square feet) depending on family size. RCHC staff helps the families select the best of several available plans for their needs. Construction is standard wood frame with stucco or wood exterior.

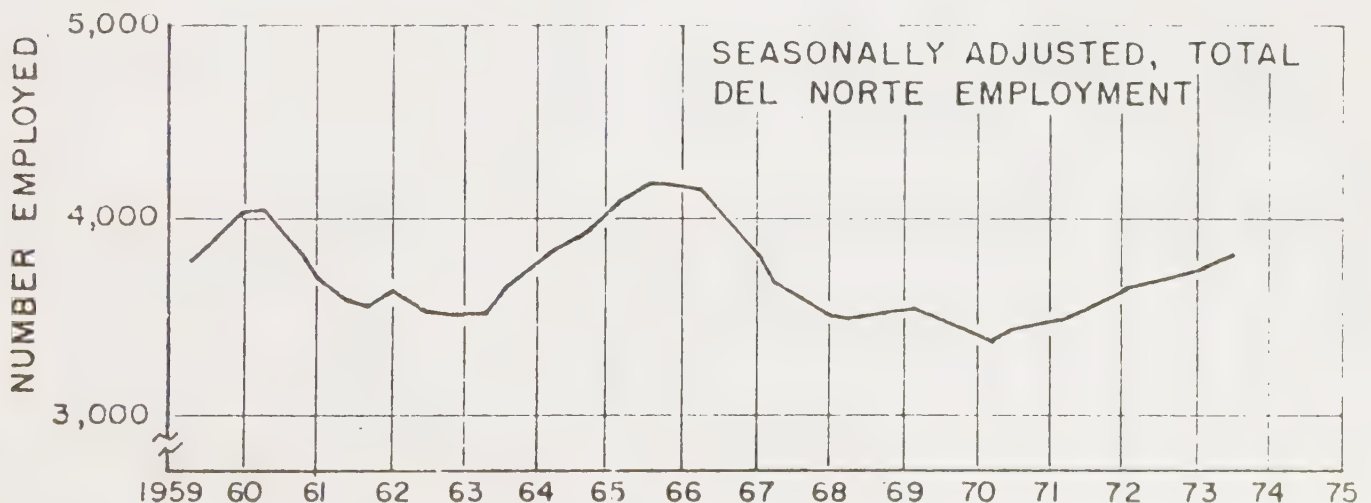
In making population projections, a number of different "models" can be used, each with its own specific advantages and limitations. The three most commonly used projections are mathematical projections, economic projections, and demographic (population trends) projections.

Mathematical projections assume that population grows according to some pattern which may be described by a curve. These projections can be used for quick reference but are however, the least reliable.

Daniel, Mann, Johnson and Mendenhall (DMJM) in their 1973 "Del Norte County, CA Report on General Plans" prepared an economic population projection based on 1970 Census figures. DMJM assumed that the total employment in the County depends primarily on the employment in the basic industries which are dependent on market, demand and economic conditions outside the County. DMJM projected employment in each of the County's basic industries and estimated the employment in other support or related industries, using 1969 data. In general, DMJM assumed that employment in wood products will increase to 1980 and then decline; employment in fisheries will show a gradual growth to 1990; employment in the industries related to tourism will increase at a rate of 5% a year; and agricultural employment will continue at a horizontal level, as is other manufacturing and mining. The table following shows the results of their projection.

Population figures were arrived at by a ratio of 2.8 persons per employed person. On this basis, population is assumed by DMJM to increase by 1,700 in the next ten years, 1,100 in the following ten years, coming back to the 1960 population level of approximately 17,771. Their projections do not consider any increase in mechanization nor change of population groups.

In March 1966, the National Park Service produced an employment projection by Arthur D. Little, Inc. This study concluded that if the Redwood National Park was created, employment in the County would be 7,600 in 1973 and 10,035 in 1983. Included in these estimates were 1,550 lumber and wood products employees in 1973 and was estimated to be 7,710 in 1973 and 8,370 in 1983. Actual employment for 1973 is illustrated in the graph below.



EMPLOYMENT BY TYPE OF INDUSTRY AND POPULATION,
DEL NORTE COUNTY, 1940-1970, WITH PROJECTIONS TO 1990

Category	1940	1950	1960	1970	1980	1990
Basic Industries						
Wood products	155	907	2,295	1,770	1,824	1,500
Fisheries	68	220	272	360	408	434
Tourism	201	380	459	400	652	1,062
Agriculture	230	237	215	200	200	200
Other manufacturing	18	35	115	100	100	100
Mining	26	7	25	25	25	25
Subtotals	672	1,786	3,379	2,855	3,184	3,411
All other industries	<u>714</u>	<u>1,280</u>	<u>2,841</u>	<u>2,431</u>	<u>2,710</u>	<u>2,809</u>
Total	1,386	3,066	6,220	5,286	5,894	6,310
Population	4,745	8,076	17,771	14,800 ¹	16,500	17,670

¹ Preliminary estimate of 1970 census as released in May 1970 was 14,344. The final figure is normally higher and is estimated here at 14,800. (Final figure was 14,580, see Table 28.)

Source: Employment data 1940-1960 -- U.S. Department of Commerce. Growth Employment Patterns in Counties, 1940-50 and 1950-60, Volume 8, 1965.

Population -- U.S. Bureau of the Census.

Note: Employment in "all other industries" is projected as 0.85 times employment in basic industries. This ratio is based on past relationships.

Employment figures projected by Arthur D. Little, Inc. were apparently aimed to economically justify the National Park. The achievement of these estimates as a result of the Park stresses the improvement of the parks ability to attract and accommodate additional tourists to the County and the tourist ability to travel to the County.

In the Fall of 1975 the County had prepared an Economic/Development Administration. Within this plan it was pointed out that 1150 jobs have been lost since 1960 in lumber manufacturing, with a net of 400 jobs being gained in other sectors of the economy, largely in government. The total labor force by place of residence for July of 1975 was 6200 with an unemployment rate of 16.5% (1025), or 5175 employed jobs. This figure is close to the ratio established by DMJM (2.8) at a 3.0 ratio of population to jobs. This economic report determines that 150 jobs for the next 10 years are necessary to offset job loss due to declines in the timber industry and to bring the County unemployment rate down to the State average. This would indicate a population of between 18,690 and 20,025 by 1986.

The above estimates have relied upon economic projection, the following projection is based solely upon demographic (population trends) projections. These projections are prepared by the California Department of Finance (June 1974) and address mortality (death), fertility (births) and net migration into the State. These projections are prepared for the State as a whole and then are refined regionally for each county. The following factors are critical to the projections:

Mortality: "Death rates in California, specific for age of descendent, have not varied radically over the past two decades."

Fertility: The lowest total lifetime fertility rate ever attained by women who have passed through the childbearing period and for whom data are available in the U.S. is 2.45 births per woman (1905-1910). Zero population growth is 2.11 per woman. An average expected births per woman is 2.5.

Migration: Highest net migration was 357,000 into California in 1963, declining to 16,000 in 1970. Since 1970 the level has risen to an estimated level of 100,000 in 1973. Projections are based on a 13 year trend.

The three projections are explained on the following page:

PROJECTION EXPLANATIONS

	Projection	Total lifetime fertility rate	Annual average net migration rate	Characteristic
(baseline)	D-100	2.5	100,000	Reasonable
	E-0	2.1	0	Reasonable low
	D-150	2.5	150,000	
	C-150	2.8	150,000	Reasonable high

(D-100 displays a pattern of later childbearing more in keeping with recent experience.)

Baseline and Alternative Projections Del Norte County 1975-2010 July 1

Year	Baseline		Alternative Projections		Assumed Military
	D-100	E-0	D-150	C-150	
1975	15400	15300	15400	15400	100
1980	16400	15900	16500	16700	100
1985	17700	16700	18100	18400	100
1990	19100	17400	19800	20300	100
1995	20600	17800	21600	22300	100

CIRCULATION



Circulation Element

The County Circulation Element includes State Freeways and Highways, major County roads and County airports. The Crescent City area and the Harbor utilize these same freeways, highways and roads and City streets. Since there is no demand for rail service which would justify the cost of construction, there are no railway lines considered or proposed for the County in its entirety. This element consists of the general location and extent of existing and proposed major thoroughfares, routes and facilities. The Circulation Element should be considered as a statement of goals, objectives and policies based on the needs of the County, while the Regional Transportation Plan (updated every two years) should be considered as a method of achieving these goals and objectives.

State Freeways and Highways

The California State Highway system provides the major traffic carrying service in Del Norte County. In its publication entitled "1974 Traffic Volumes on California State Highways," state highways in Del Norte County, as in other counties, are described in terms of their "milepost description" (the location of each segment of the highway); peak hour traffic; and average daily traffic (ADT) on peak month (month of heaviest traffic flow) and an annual basis.

A short explanation of these terms and their use will aid in understanding the tables which follow.

Milepost

Points along the highway are identified by a milepost value corresponding to that point on the highway. Milepost values increase from south to north and from west to east depending on the general direction the route follows within the state, starting at the beginning of the given route and starting over at each county line. Mileposts at a given location will remain the same year after year. Relocated sections will be given new milepost values, and, where the relocation results in a change in length, equations are established at the end of the section to permit the mileposts on the remaining portion of the route to remain unchanged.

Significant changes in volume (breakpoints) in the traffic profile are identified by their corresponding milepost. In the table which follows, figures shown above each milepost designation apply to the traffic volume immediately behind (approaching) the milepost while those below apply to the volume ahead (leaving) of the milepost. Volumes may be assumed reasonably constant between breakpoints. All figures represent two-way volume.

Average Daily Traffic (ADT)

Annual Average Daily Traffic is the total traffic volume for the year divided by 365 days. Very few locations are actually counted continuously. Traffic counting is generally performed

Traffic Volumes State Highways

Route 101 Milepost	Location	1975 ADT	Peak Hour	1974		1969 ADT	1961 ADT
				ADT			
				Pk.Mo.	Annual		
0.00	Humboldt Co. Line	4400	620	8600	4100	2950	1800
R3.56	So. Bank Road	4500	620	8400	4100	--	--
R4.64	Jct. Rte. 169	--	640	9500	4550	3700	3100
8.18	Requa Road	5200	620	9800	4800	--	--
10.87	Trees of Mystery	5100	610	9700	4700	--	--
23.69	Humboldt Road	5100	660	6200	4700	3450	2500
25.84	Elk Valley Rd.	13400	1500	16500	12400	11100	7900
26.42	Fourth Street	15600	1600	18900	14300	12000	7600
26.68	Ninth Street	16000	1650	19700	14800	13600	11900
27.07	Northcrest Dr.	9200	1050	10500	7900	6900	3800
28.21	Washington Blvd.	--	--	--	--	4650	3900
R27.87	Washington Blvd. Interchange	6000	660	6700	5100	--	--
31.18	Elk Valley Cross Rd.	4700	600	8200	4000	--	--
36.26	Jct. Route 197	5100	660	9000	4400	3450	2900
39.83	Fred Haight Dr.	4200	540	7400	3600	3200	--
46.49	Oregon State Line	3900	500	6800	3350	2800	--
Route 169							
0.00	Jct. Route 101	2000	290	3700	1800	1600	--
2.77	Red Mountain Rd.	880	120	1550	750	720	--
Route 197							
R0.00	Jct. Route 199	1050	170	1650	900	640	320
7.08	Jct. Route 101	1000	160	1700	850	460	270
Route 199							
R0.00	Jct. Route 101	2850	510	4750	2550	220	1800
4.37	Jct. Route 197	2900	520	4850	2600	2500	1800
5.90	Hiouchi	2600	460	4250	2300	2400	1200
14.55	Gasquet	--	--	--	--	1500	980
T14.64	Gasquet	2300	470	3800	2050	--	--
28.23	Idlewild	2000	360	3550	1800	1450	940

by mechanical counting instruments moved from location to location throughout the State in a program of continuous sampling of traffic counts. The resulting counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influences, weekly variation, and other variables which may be present.

The Peak Month ADT is the average daily traffic for the month of heaviest traffic flow. This data is maintained because on many routes, high traffic volumes which occur during a certain season of the year are more representative of traffic conditions than the annual ADT.

Peak Hour Volumes

On roads with large seasonal fluctuations in traffic (as in Del Norte County), the peak hour is the hour near the maximum for the year, but excluding a few (30 to 50 hours) that are exceedingly high and are not typical of the frequently occurring high hours during the season.

The State highways passing through Del Norte are the most heavily traveled highways in the County and form the backbone of the Region's highway network. While the 91.4 miles of State highways accounts for only 10% of the Region's total highway mileage, 60% of the total daily vehicle miles (DVM) traveled within the Region occurs on these highways. Route 101 and Route 199 are the principal arterials. Both Route 101 and Route 199 are considered Routes of Statewide significance.

Route 101 through the Region extends from the Humboldt County line, north along the coast, to the Oregon Border. The length of the highway in Del Norte County is approximately 45 miles, of which about nine miles are four-lane, 35 miles are two-lane highway, and one mile is a couplet formed by two one-way streets, each two lanes wide.

Route 199 is about 36 miles in length within the Region. Approximately 29 miles are two-lane, and seven miles are four-lane highway. Route 199 extends through the Region from Route 101 northeasterly to the Oregon border.

Route 169 is a two-lane highway along the north bank of the Smith River. It is seven miles in length and connects Route 101 with Route 199.

The Del Norte Regional Transportation Plan includes a 1995 functional classification which lists the projected travel growth over the planning period. The functional classification criteria have been developed as a planning tool to be used for system identification and as an indicator of the type of service and level of service appropriate to guide development of future systems. A description of the functional classification system is included in the appendix of this element.

The following Table summarizes the mileage and vehicle mile information included in the 1995 Functional Classification of Highways. Also shown are the 1975 mileages and daily vehicle miles (DVM) for State highways, County roads, City streets, and other roads.

The roads as classified in the 1995 Functional Classification are shown on the maps following the Tables.

Recommendations for State Highways

It is recommended that Route 101 be upgraded to four-lane expressway or freeway standards throughout the Region. Several major construction projects on new alignment and some reconstruction on present alignment are proposed.

No highway improvement projects are proposed on Route 169, during the 20 year planning period. The existing two-lane conventional highway, although substandard in alignment, is considered adequate for traffic volumes at the present time.

One new alignment construction project is proposed on Route 197. This proposed project would improve the existing two-lane conventional highway from Club Drive to the junction of Route 101.

The County should continue to actively encourage the State to improve access into the County via Route 199 and 101. Development of facilities to improve access by the Department of Transportation to the County should be of a high priority to local government.

County Arterials

Traffic on the major County maintained roads in the County is mainly of the local, intra-county character. Most of the tourist and recreational travel occurs on the State highway system. Del Norte County roads are considered to be among the best local roads, in terms of service and condition, in the State Highway District 1.

The most traveled arterial roads in the County are indicated on Table III. Northcrest Drive from the Crescent City limits to Old Mill Road, and Lake Earl Drive (extension of Northcrest Drive) from Old Mill Road to Blackwell Lane is carrying the most traffic. Northcrest Drive/Lake Earl Drive serve the bulk of the County's population north of Crescent City.

Del Norte County's major roads have been built within and in the vicinity of the Crescent City area. This is due primarily to the location of the highway network in the area and the realignment of

1995 FUNCTIONAL CLASSIFICATION

Jurisdiction	1975		1995	
	Miles	DVM (x10 ³)	Miles	DVM (x10 ³)
State Highways	92	336	91	598
County Roads	318	198	325	251
City Streets	18	20	20	44
Other	<u>477</u>	<u>6</u>	<u>492</u>	<u>15</u>
	905	560	928	908

Functional Classification	1995	
	Miles	DVM
<u>Rural</u>		
Principal Arterial	80	557
Minor Arterial	0	0
Connector	0	0
Major Collector	81	85
Minor Collector	26	16
Local	<u>694</u>	<u>157</u>
Total Rural	881	815

<u>Urban</u>		
Principal Arterial		
Type I Freeway	2	24
Non-Freeway	0	0
Type III	0	0
Type IV	2	16
Minor Arterial	6	35
Collector	7	16
Local	<u>30</u>	<u>2</u>
Total Urban	<u>47</u>	<u>93</u>
County Total	928	908

Table III

*Average Daily Traffic
Counts on Collector Arterial County Roads 1973

Rank in Activity	Street	*ADT	Counter Location
21	Anchor Drive	1221	300' West of Hwy 101
6	Citizens Dock Rd.	3005	200' West of Hwy 101
16	Cooper	1579	200' East of Del Norte St.
11	East Washington Blvd.	1922	200' East of Northcrest Dr.
17	El Dorado	1565	Between Hamilton & Harding
5	Elk Valley Rd.	3706	200' NE of Hwy 101
19	Elk Valley Cross Rd.	1376	200' East of Lake Earl Dr.
22	Harding Ave.	1106	200' East of El Dorado
14	Howland Hill	1670	300' East of Elk Valley Rd.
13	Inyo St.	1768	200' North of Pacific Ave.
18	Klamath Mill Rd.	1393	North of Hwy 169
4	Lake Earl Drive	4632	200' North of Blackwell Ln.
9	Lake Earl Drive	2161	200' North of Elk Valley Cross Road
21	Lake Earl Drive	1259	200' North of Lower Lake Rd.
20	Lake Earl Drive	1329	300' North of Moorehead Rd.
10	Macken Ave.	1927	200' East of Pebble Beach Dr.
2	Northcrest Drive	8120	300' North of Washington Blvd.
1	Northcrest Drive	9280	200' North of Coolidge Ave.
3	Northcrest Drive	5700	300' North of Old Mill Rd.
7	Pacific Ave.	2803	200' West of Butte St.
15	Pebble Beach Drive	1609	200' NW of Del Monte St.
23	Pebble Beach Drive	1082	500' NW of Murphy Ave.
8	Washington Blvd.	2695	300' West of Northcrest Dr.
12	Washington Blvd.	1793	200' East of Inyo St.

this system by the State and the older sections becoming County arterials. Major roads, other than State highways are as follows:

East-West Arterials

Washington Boulevard
Cooper Avenue
Pacific Avenue
Elk Valley - Elk Valley Cross Road

North-South Arterials

Pebble Beach Drive
Inyo Street
El Dorado Street
Northcrest Drive/Lake Earl Drive
Kings Valley Road
Ocean View Drive

The County's arterial roads function at two levels:

- 1) They interlace with the State Highway system providing regional service, and
- 2) They interlace with the major and minor (local) streets for local service to the City of Crescent City and the outlying communities of the County.

The County road system is integrally involved in access to the State and National Parks, the Harbor, the County Airports and providing service to the residents of the County.

An important consideration in planning for major County roads (and City streets) is where they will meet the interchange with any freeway construction in the County. Special consideration will have to be made of "at-grade" intersections of local roads with State highways until such intersections are converted to interchanges when the highway is upgraded to freeway status.

Each of the following intersections, interchanges or overpasses should be examined for traffic service, land use, zoning, landscaping, sign controls, and urban/rural design possibilities:

State Route 101

Klamath, Junction with Route 169, Southeast
Hunter Creek Road
Redwood Drive
Humboldt Road
Sand Mine Road
Elk Valley Road
Junction Route 199

*Washington Blvd./Parkway Drive
*Elk Valley Cross Road
South Bank Road/Lake Earl Drive
Junction Route 197
Fred Haight Drive
Ocean View Drive
Oregon State Line

State Route 199

Junction with 101
Junction with 197
Hiouchi Village, East
Gasquet, East
Oregon State Line

State Route 197

Junction with 199
Junction with 101

State Route 169 (Existing)

Klamath, Junction with 101
Klamath Glen

The importance of this future design consideration cannot be over stressed. Without adequate controls, these focal points can be over-run with signs, billboards, incompatible land uses, traffic conflicts and other conditions which could be harmful to good development. If each intersection and interchange can be subjected to a joint urban/rural design effort, involving State, County, City and Private owners, all interests involved can have an opportunity to create a quality of improvement that will be a benefit to the community.

There has been much discussion on the need for a connection between the community of Gasquet in Del Norte County, and Orleans in Humboldt County. Both of these communities are situated within the Six Rivers National Forest. Gasquet is located on State Route 199; Orleans is on State Route 96. In terms of straight-line distance, they are about 44 miles apart. Two main considerations for this road are:

A "GO" road would provide access to the interior of Del Norte County, essentially within the boundaries of the Six Rivers National Forest. Existence of such a road could be a positive advantage in stimulating recreation travel within the County.

* These two intersection areas could be the main inter-changes with a Highway 101 freeway and Crescent City. Additional consideration to properly relate the City and County circulation needs will be warranted at these points.

An interior road could provide access to those forest areas marked for cutting and commercial use as part of the U.S. Forest Service management plan. This could be of benefit to the County's lagging lumber economy, and generate additional business for Crescent City Harbor shipping facilities.

The Gasquet-Orleans road, shown in Figure I, is being developed by the U.S. Department of Agriculture Forest Service. The present north terminus of the GO Road connects with the existing Del Norte County South Fork Road (FAS 985) about 15 miles south of State Route 199. Indications are that substantial improvement to the present South Fork Road would be necessary to bring it to a comparable standard established by the GO Road. The present South Fork Road traverses several areas of highly unstable soil conditions, particularly in the area of Little Rattlesnake Mountain. These conditions cause very high maintenance costs on this portion of the road. Topography in the area makes alternate route selection difficult.

When completed, this roadway may be expected to attract a number of visitors since it will provide access to large reaches of the National Forest. It will also provide this access from an inland route (State Route 96) and may reduce traffic on Highway 101 to some degree, effectively providing an additional point to Del Norte County. This factor could prove beneficial to tourism since many of the scenic areas in Del Norte County are now virtually inaccessible.

The impact of this roadway on areas such as Crescent City, however, is less predictable. It could provide a by-pass effect permitting motorists to tour the National Forest, intersect Highway 199, and proceed northward without entering Crescent City. To insure increased tourism in Crescent City and environs will require additional efforts to attract overnight visitors.

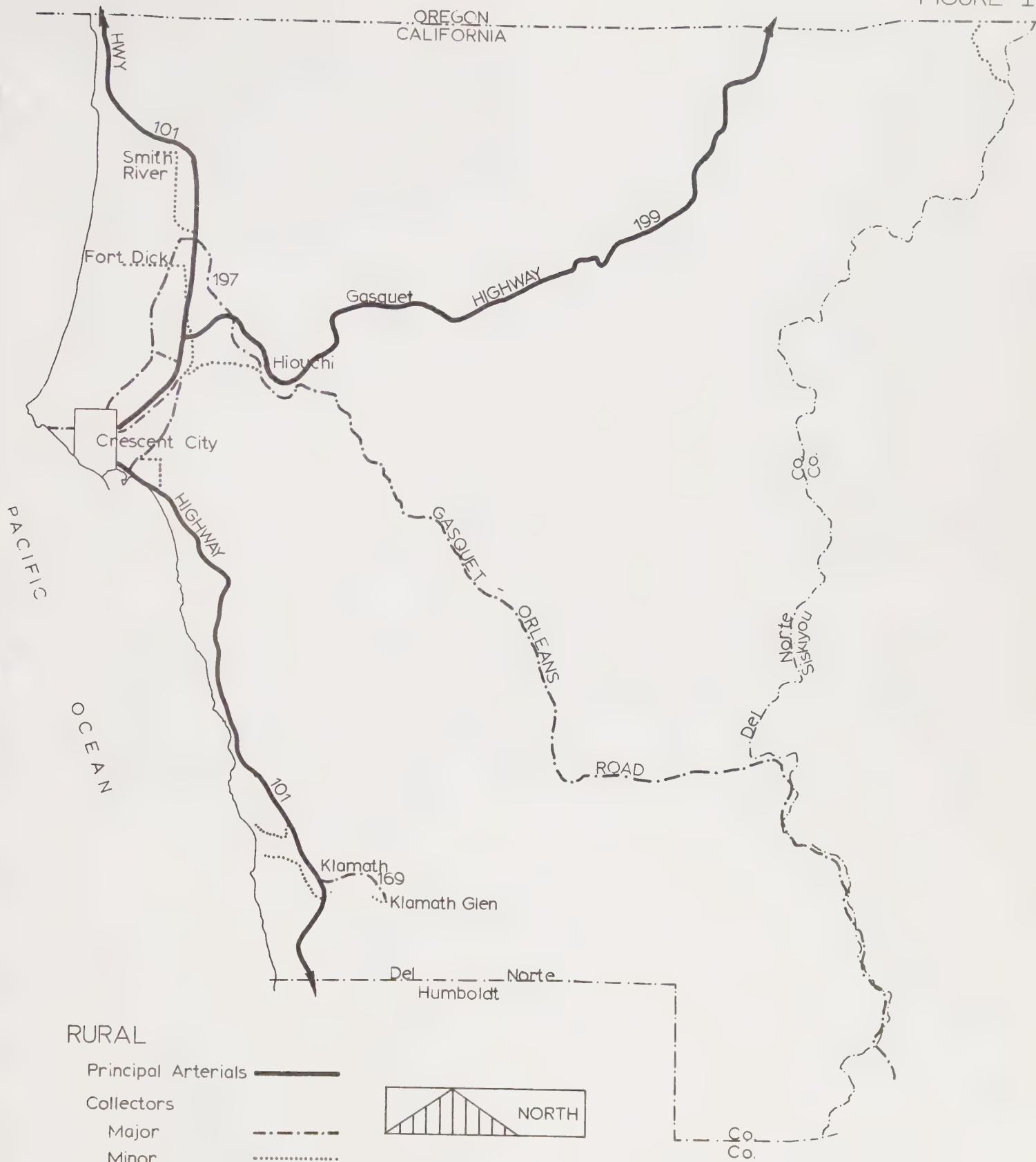
At the present time, bicycles are permitted on existing County roads and State highways, but no special facilities exist for them. The City of Crescent City has developed a bike route which traverses City streets and has some section of bicycle paths. The Redwood National Park has not developed nor designated any bicycle routes or paths, neither has Humboldt County to the South, or the State of Oregon to the North (which intersect with Del Norte County). However, the number of bicyclists and bicycles has increased dramatically in the past few years. The County should, therefore, consider bicycle use in the improvement of existing roads or the development of new roads, with priority given to those areas which tie into the City route or any routes developed by the National Park. (See City section on Bike Routes and appendix.)

The area immediately north of Crescent City, Filkins Tract, is essentially an urban area within the County's jurisdiction. Recently the County has improved Pacific Avenue with curbs and gutters within an eight block area. Similar improvement is needed and will become increasingly important as the area continues to develop.

Recommendations for County Area Roads

Major expansion of the County road system does not appear to be required to meet projected demands for intra-county service. It is reasonable to assume that sufficient funds will be available to maintain the level of service needed to keep the County road system in its present condition and to make necessary improvements.

1. The activity taking place southeast of Parkway Drive indicates that an extension of Washington Blvd. easterly to serve this area will need to be considered. At the time of consideration, factors to be evaluated would be: length of the extension, environmental impact, growth inducing impact on the Elk Creek wetland and cost in relation to service provided.
2. The creation of a County scenic drive tying into Crescent City and the harbor area. This drive route should promote the scenic values of the County's shoreline, harbor, agricultural lands and should portray to the visitor the modes of life in Del Norte County.
3. The policy of requiring improvements for subdivided or parcelized areas which do not front on a public right-of-way should be stringently enforced. The construction of any new road by a developer should proceed in accordance with comprehensive planning before any acceptance by the County into its road system.
4. A study is needed to improve circulation and traffic problems around the High School. Serious conditions could result from the present restricted access for emergency vehicles.
5. Continuing discussions should be held with the National Park and Forest Service planners and the State Division of Highways in an effort to anticipate new route considerations and recreation travel demands in the County.
6. The County should consider bicycle use and pedestrian walkways in the improvement of existing roads or the development of new roads. Priority of bike paths should be given to those routes which tie into the City route or any routes developed by the National Park. Development and construction of bicycle paths or pedestrian walkways should be based on actual need in relation to the cost involved. (See City section on bicycles.)
7. The County should develop a list of improvements and construction projects to be accomplished on County roads and categorize these projects into need, cost, length of time involved and public support, and then prioritize these projects. This list will serve only as a guide to development and can be used by the various County departments in determining the effect upon their activities.



FUNCTIONAL CLASSIFICATION

1995

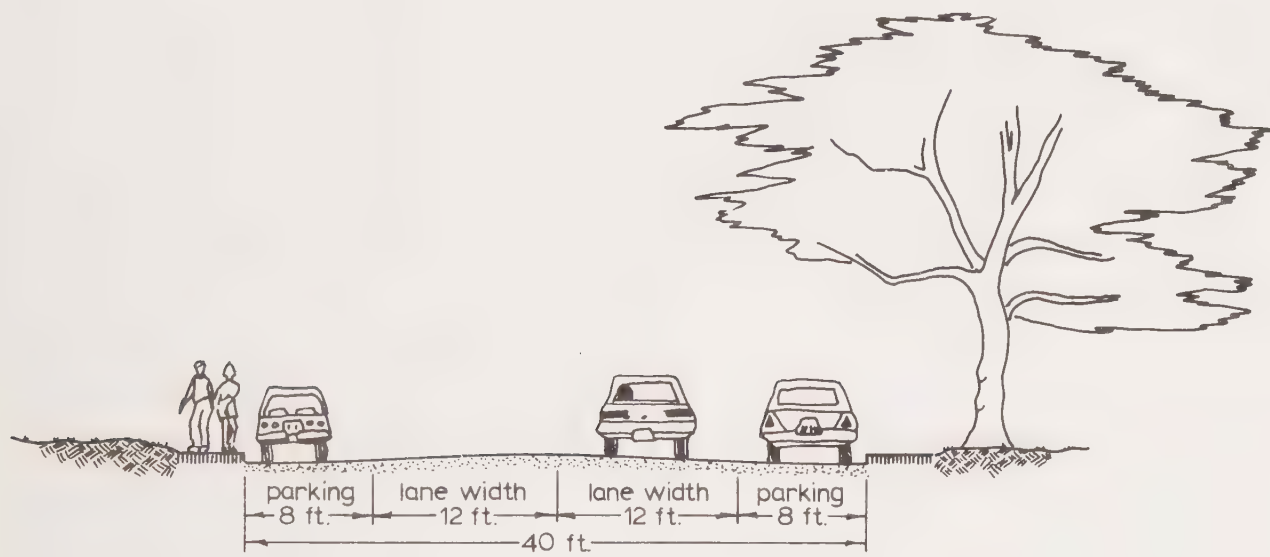
Circulation in Crescent City

Circulation within Crescent City is achieved through a conventional grid pattern using approximately 30% of the existing land area within the City. The high percentage of land in circulation use is caused by city blocks, which are 300 feet in dimension and square in shape. Heaviest traveled of the City streets, other than the Highway 101 one-way couplets, include Front Street with some 8,000 vehicles east of "H" Street, and Ninth Street, also with 8,000 vehicles per day east of "H" Street. "H" Street itself carries nearly 5,000 daily and Third Street, east of "G", is in the same 4,000 to 5,000 vehicles per day. Other high volume streets include "A" Street, "G" Street and Fifth Street. Northcrest Drive has substantial volumes of traffic, particularly in the area immediately adjacent to the shopping center south of Wilson Avenue. The traffic flow map on page 13 depicts the travel patterns in the City.

Major access to Highway 101 is provided to the City by Front, Third and Ninth Streets. The high volume streets in Crescent City are generally commercial in nature being fronted primarily by commercial activities. "K", Fourth and Fifth Streets parallel the above primary streets and act as alternates in serving the commercial activity of Crescent City. Northcrest Drive with Harding provide access to Highway 101 and to the shopping center.

The remaining streets can be termed "residential" and are designed to provide direct access to residences. Ninth Street west of "E", Pacific Avenue, "A" Street, Pebble Beach Drive and Fifth Street are the most heavily traveled "residential" streets. Streets with consistently low volumes, west of "G" Street are, Second, Third, Fourth, Sixth, Seventh, and Eighth, and "B" through "F". These untraveled, or lightly traveled streets should be studied with a view toward uses other than exclusively vehicular traffic. Such changes will be limited in that access to existing lots will still have to be provided and sewer and water lines maintained.

The existing Crescent City specifications for residential streets are depicted in the following drawing and as follows:

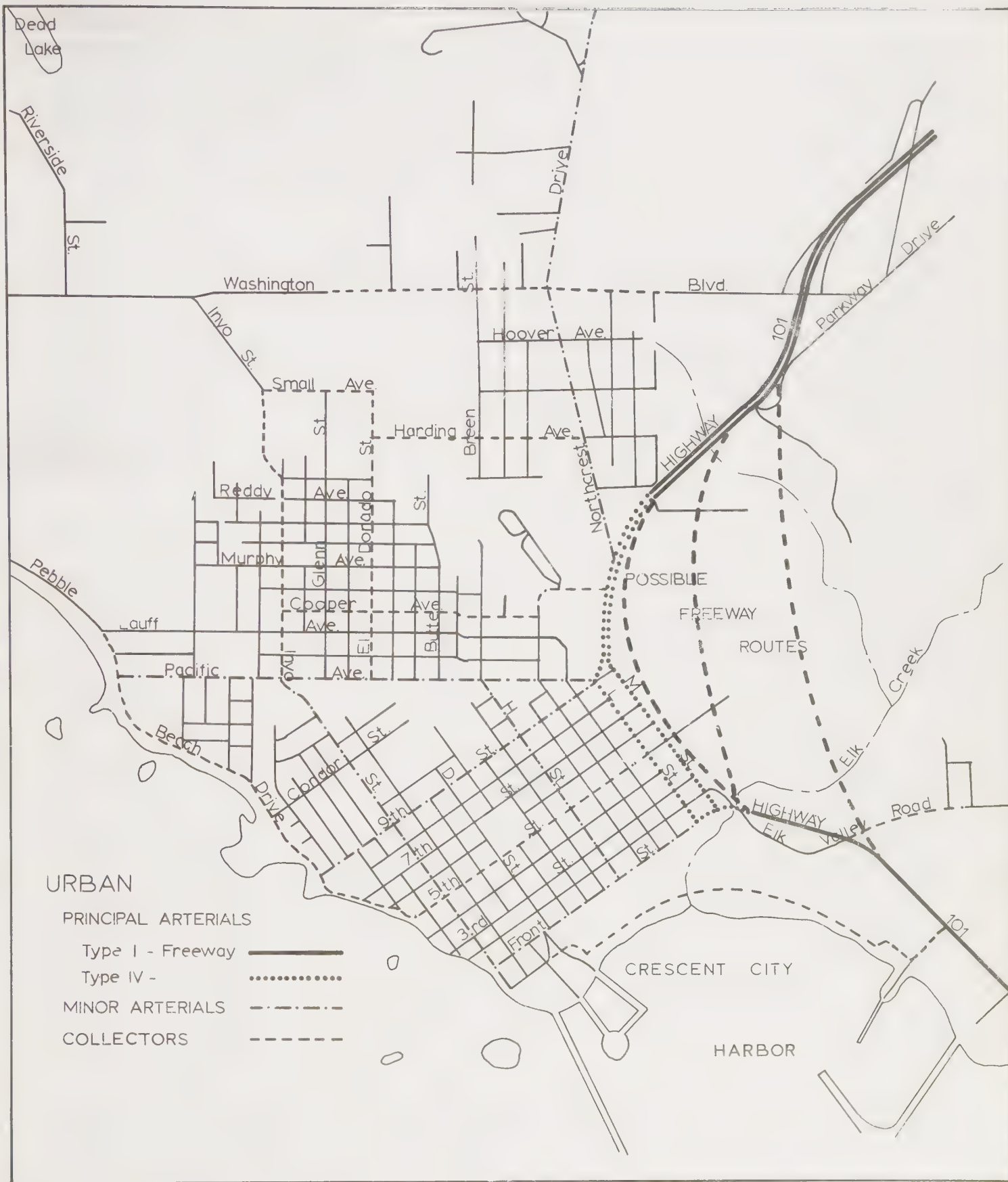


Curb to curb	40 feet	
Curb width	6 inches	
Sidewalks	5 feet	(Beresa exception 4.5 feet)
Total easement	60 feet	(Beresa exception 50 feet)

Streets within the City which are wider are Front Street (4 lanes), Northcrest Drive (4 lanes) and Highway 101 (north of 9th Street and south of Front Street).

Field surveys of parking problems of Crescent City indicate that there is adequate off-street parking for all of the uses of the City. There is a high percentage of utilization of on-street parking in the downtown area. There appears to be no double parking by trucks for delivery due to insufficient on-street or off-street parking.

An existing and future pedestrian safety problem in the City is the difficulty pedestrians have in traveling along city streets that have no sidewalks. Pedestrians in areas where there are no sidewalks usually walk in the parking area. In this location they are vulnerable to the line of traffic and are especially vulnerable when they walk directly into the traffic lanes, walking around parked cars. This safety problem is increased when this situation occurs on heavier traveled streets.



1995 FUNCTIONAL CLASSIFICATION

The City of Crescent City has established a bike route within the City limits (See Figure IV). This bike route utilizes lightly used residential streets, other street sections with separate bike lanes and sections of bike paths. For the Crescent City urban area bicycles are becoming a more popular transportation mode for more age groups. However, the year-round climate of Crescent City has not encouraged the large demand for bicycle facilities as has been experienced elsewhere.

Bicycle facilities are categorized by the degree to which they separate bicycle movement from traffic flow. The most common designations are: bikeways, indicated by signs on existing streets; bike lanes, indicated by signs and striping on existing streets; and bike paths, consisting of a completely separated right-of-way for the exclusive use of bicycles. Together with selecting appropriate facility types, the treatment of transition areas should also be considered. Often bicycle facilities will be terminated at intersections or points of narrowing road width, thus creating more traffic and safety problems than they resolve.

Criteria for choosing the type of bicycle facility design depends on the volume of bicycle traffic, physical and operational constraints, and the level of public interest and funding. While signing of secondary streets as "bike routes" demonstrates civic interest, these bike ways will not be heavily traveled unless they happen to coincide with routes of direct access. Since bicyclists rely upon their own motive power, they are reluctant to go far out of their way to reach a destination, except for pure pleasure cycling. A system of bicycle facilities which discourages cyclists from the alignments of direct access will serve little purpose, irrespective of minor incentives or disincentives to the contrary.

Bike lanes generally improve the flow of both bicycle and autos and are suitable for streets with moderate motor vehicle volume and low speed limits. Existing city streets are only 40 feet from curb to curb. The recommended width for bike lanes (see appendix) including edgelines and the lane itself is 5 feet 10 inches. Establishment of lanes on City streets would eliminate parking on these streets with a 28 foot area for vehicular traffic. If parking were allowed on one side of the street, this would result in a 20 foot area for vehicular traffic, two bike lanes (one on each side and one parking lane), however, the center traffic lane would not be in the physical center of the street creating confusion for the motorist, and additional traffic hazards. Bike paths are the safest for the cyclist and the motorist but their cost is high and would have to be justified. Bike routes using low volume streets with no separate lanes are the least cost facility.

Due to street width, bike routes will be the primary type of biking facility in the Crescent City area. Additional study of need, use, public support and their effect on parking and traffic will have to be conducted prior to the creation of any bike lanes.

The City of Crescent City and Del Norte County should co-ordinate in the future consideration or construction of any bike facilities. Routes, lanes or paths to be considered would be:

- 1) those which tie in to the Redwood National Park and its facilities.
- 2) those which would provide destination routes such as between the High School and Crescent City downtown via the wooded area by the cemetery.
- 3) those which link recreational facilities or access to recreational areas of the City and County.
- 4) those which promote visitor use as well as resident use.
- 5) development of Elk Creek as a regional activity area.

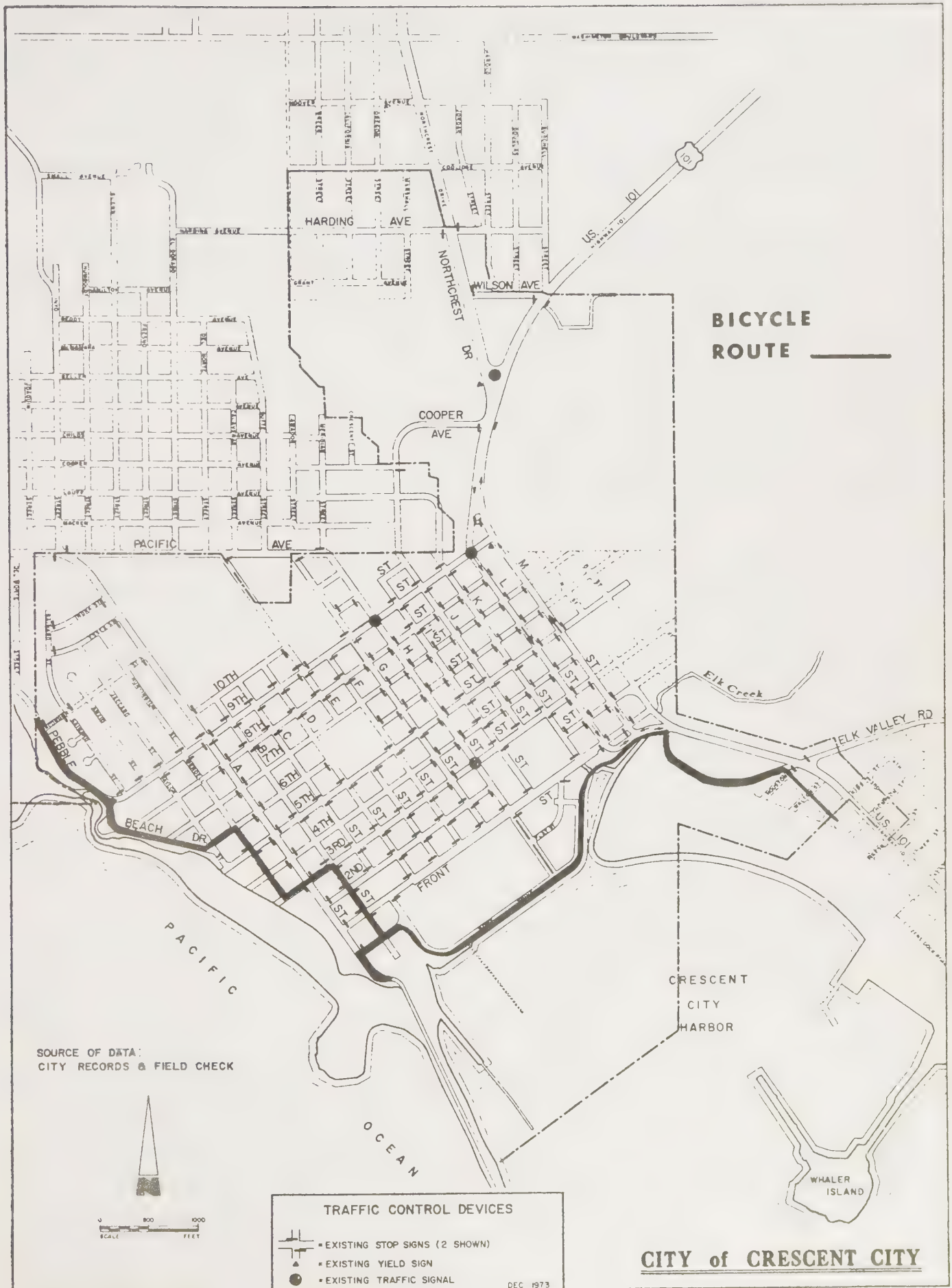
The waterfront development of the City is tied to the City but is separated physically from the harbor area itself. Presently the bike route and Highway 101 are the two transportation routes between the City and the Harbor. The construction of a shoreline drive between the City and the Harbor would establish a stronger relationship between these two key economic areas. Factors to be considered prior to construction are cost, location, effects on existing transportation routes and local traffic vs. visitor traffic. A key factor to be dealt with concerning the harbor is the effect additional access to the Harbor would have on Harbor security. The bridging of Elk Creek will be an important cost factor in the construction of a Harbor/City connection. The design of the bridge itself should consider traffic load, weight capacity, bicycle and pedestrian needs, and aesthetic design, and any existing or proposed recreational activities on Elk Creek.

A project which will have the most significant impact on Crescent City and its surrounding area is the construction of a 101 Freeway bypass of Crescent City. Four routes were originally proposed:

- A) Runs north and south in the vicinity of the Bertsch Tract.
- B) East of "M" Street adjacent to existing Highway 101 consisting of an elevated or vertical configuration.
- C) East of the County Fairgrounds, the Infirmary and McNamara and Peepe.
- D) Runs north and south, easterly of Crescent City about midway between the City and Bertsch Tract.

Routes A and D would not conform to the newly constructed freeway section north of town and would diminish the value of Crescent City as a traffic service facility. These two routes would reduce the recreational value of the Crescent City area and would result in the relocating of highway traffic services to the interchanges of these routes. The City and County should not support these two routes due to the negative effects upon the economics of the City and the commercial development associated with this type of a freeway section being located in a predominately rural area.

Figure IV



Routes B and C are the two most practical routes from a City and County standpoint. Route B would provide maximum traffic benefits to the urban area of Crescent City. A functional differentiation between downtown and the adjacent recreational and industrial uses, and would protect the wetland value and future potential values of Elk Creek. The difficulties with Route B are in relation to the vertical configuration of the freeway with respect to interchanges and local streets. Potential noise problems could develop from the faster moving traffic close to the downtown area.

Route C would be the shorter of the two appropriate routes and would be physically separated from the downtown area. This route would pass through the center of the Elk Creek basin requiring bridges and special construction considerations through an area of high water table and poor soils. The recreational value and wildlife value of Elk Creek would be affected and mitigated in some way. The distance involved and physical quality of the route would most likely dictate only two interchanges for the City; one at Parkway Drive and the other at or south of Elk Valley Road. The economic and land use impact of these interchanges on their immediate areas and the established urban area will have to be evaluated. The entire complex of highway, ecology, drainage, recreation, circulation, economic impact and land use impact will have to be investigated in terms of costs, function and benefits.

The Crescent City Freeway project is included in the Regional Transportation Plan as reaching construction some time after 1980 for either a constrained or an unconstrained fiscal situation for the Department of Transportation. The present two way couplet with uncontrolled access will be deficient by present capacity standards of the Department of Transportation by 1978. There is a higher than expected accident rate on the existing route; however, the number of fatalities is small considering the high traffic volumes. Ultimate construction to freeway status will probably be required to provide safe and convenient travel for local and through traffic. A freeway route is considered by the Department of Transportation to be of Statewide significance due to its function of connecting Crescent City and Del Norte County with the rest of California and its neighbor state.

A project for improvement will likely not occur until at least the late 1980's due primarily to the shortage of funds. When further study becomes necessary to designate a specific route location, a comprehensive community involvement program should be initiated.

Recommendations for Crescent City

A detailed plan for the development of City streets is not available at the present time. However the City does propose to improve its streets as funding becomes available.

1. Local road construction located within the incorporated limits of Crescent City should be at the discretion of, and in accordance with, priorities established by the City Council and the City Department of Public Works.

2. The City should coordinate with the Harbor District to extend Howe Drive to Citizens Dock Road.
3. The City should develop a listing of future improvements and construction projects to be undertaken within the City and categorize these projects as to need, cost, length of time involved, public support and prioritize these projects. This list will serve only as a guide to development and can be used by various agencies in their planning efforts.
4. The City should consider bicycle use in the improvement of existing streets and the construction of new streets. Development and construction of bicycle facilities should be based on actual need and use in relation to the cost involved. Facilities should follow destination routes.
5. The City should develop a program of constructing pedestrian walkways and sidewalks for its street system. Those streets which carry heavy traffic loads should be considered as priority for sidewalk construction.
6. The City should investigate the possibility of replacing the concrete-covered median strip of Highway 101 north of 9th Street with a landscaped median. The City and County should cooperate in improving the approaches to the City area by Highway 101.
7. The City and County should cooperate in the alignment of any freeway by-pass of Crescent City, insuring that the following criteria are achieved:
 - A. Economic impact upon the City is minimized.
 - B. Relocation of residences and business is minimized.
 - C. The recreational and wildlife value of the Elk Creek Basin is maintained.
 - D. A sufficient number and location of interchanges is provided to insure the economic viability of Crescent City is maintained.
 - E. The relocation of business activities from the downtown area to a new freeway location is severely minimized.

County Airports

The County currently has three airports in use; two are County maintained (Jack McNamara Field near Crescent City and Ward Field in Gasquet) and one private field (Ship Ashore, near the mouth of the Smith River). The County also owns property at what was once McBeth Field in Klamath Glen, however, the runway is no longer usable due to the closeness of the adjacent flood-dike for the Klamath Glen.

Jack McNamara Field is one of the County's best transportation facilities. It has a great potential for business, tourist and general passenger development. Located near Crescent City, the County owned facility is at the geographic location of 41 degrees, 46 minutes, 49 seconds latitude; and 124 degrees, 14 minutes, 7 seconds longitude. Its altitude is 57 feet above sea level. The northeast-southwest runway is 5000 feet long and 150 feet wide. It has an asphaltic-concrete surfacing finish and is marked and lighted for instrument landings. The northwest-southeast runway is approximately the same in dimensions and surface finish.

Air navigation aids at McNamara include Federal Aviation Administration, Flight Service Station facilities (FSS) and very High Frequency Omni-Range (VOR) receiving and transmission. (High frequency transmission and receiving can be operated through the omni-range facilities simultaneously.) Other air navigation aids include high intensity runway lights and precision instrument markings and a rotating beacon which operates from dusk to dawn. (There are no arresting barriers or blast fences.)

There is one fixed base operator qualified for charter, instruction and advertising activities. The fixed base operator owns a large hanger structure containing offices and a shop for full aircraft maintenance.

The existing terminal building is a 10 feet x 16 feet concrete block building with an attached passenger building that measures 35 feet x 80 feet. There are 19 hangers at the airport to house the existing based aircraft. Fuel capacity is 4000 gallons of type 80/87 and 4000 gallons of type 100/130, both of which are installed underground. Fire and crash equipment consists of a 3/4 ton truck equipped with a dry chemical and light water fire unit.

Based aircraft consist of nine single-engine planes. Scheduled airline operations consist of two daily schedules - one northbound and one southbound - service provided by Hughes Air West.

In 1974, there were approximately 1100 scheduled departures (Hughes Air-West) and 3300 other departures for a total of 4400 local and itinerant aircraft according to the FAA flight service station.

McNamara Field
Crescent City, California

	1970	1971	1972	1973	1974	1975
Departure Performed (scheduled)	1190	1019	848*	1205	1117	
Passenger Originations (scheduled)	4891	4123	3150*	5103	5070	
Freight and Express Originations (tons)	2.5	2.5	2.75	3.05	3.25	

* These figures are lower due to the airline strike
January - March 1972

Vehicular access to McNamara Field is achieved by Pebble Beach Drive and Washington Boulevard. The airport can be reached within ten minutes from almost any place in Crescent City.

There are two secondary airports in Del Norte County. One is Ward Field in Gasquet. The other is a private, unimproved field near Ship-Ashore near Smith River.

Ward Field is situated immediately west of the village of Gasquet, between Highway 199 and the Gasquet Flat Road south of the Smith River. It has one runway that is 3,179 feet long. The field is situated in mountainous terrain, which severely limits its prospects for expansion. It has a continued value as a private recreational facility.

McBeth Field in Klamath Glen (a mountainous area) has not been safe for use since the construction of the levee around Klamath Glen. This facility was oriented to private recreation use. Consideration should be given to reconstruction of McBeth similar to its original design (75 feet wide and 2000 feet long).

In March of 1959, the Del Norte County Board of Supervisors adopted Ordinance 283, the "Airport Zoning Ordinance". This ordinance regulated and restricted the establishment of flight obstructions in the vicinity of the Del Norte County Airport. In July of 1969, the Board adopted Ordinance 69-13, and extended similar regulations to all of the County's secondary airports.

Airport zoning established a 12,000 foot restricted area for obstructions (structures and natural growth) from the end of any runway at the County Airport. This 2.2 mile distance covers nearly all of the urban development in the Crescent City area north of Pacific Avenue.

A 10,200 foot restricted area has been established for the secondary airports. Special height limits have been established in both ordinances for inner turning zones, outer turning zones, runway approach zones, glide slopes and transition zones. Height limits begin at 150 feet at the inner perimeter of the turning zones and increase at a rate of 20:1 to the outer perimeters.

Airport zoning is presently in effect at McNamara Field and the secondary airport at Gasquet (Ward Field). Any future construction of a McBeth Field should involve similar airport zoning.

Recommendations

- 1) Replace the obsolete runway lights along runway 17-35 with modern medium intensity runway lights. (McNamara Field)

- 2) Replace existing obsolete and unreliable auxiliary generators with a new unit. (McNamara Field)
- 3) An increase of 20 acres of McNamara Field is needed to accommodate any future expansion of airport runways. Runway 17 would need an extension of 1,000 feet to accommodate commercial jet service.
- 4) Land uses in the vicinity of McNamara Field's approach and takeoff zones should be held to the lowest densities and development intensities possible. Height zoning should be vigorously enforced. Encroachment into the horizontal or vertical zones should be prohibited. The County's two Airport Zoning Ordinances should be constantly reviewed and updated as required.
- 5) Land uses in the vicinity of Ward Field should be evaluated as to their impact on field use and densities should be enforced which will provide for the safety of nearby residents and insure the continued availability of Ward Field.
- 6) Explore the possibility of establishing a recreational field in the Klamath Glen Area.

Rail Facilities in Del Norte County

Del Norte County lacks any rail service or connection to the national railroad network at this time. The nearest national rail facilities are 75 miles south in Arcata, California and 85 miles to the north at Grants Pass, Oregon.

Del Norte County built a narrow gauge railroad from Smith River to Crescent City in 1890. The purpose of this rail link was to facilitate the movement of logs within the coastal plain of the County.

Several factors limit the future development of national rail facilities within the County. Topographic problems generated by the meandering Smith River and rough terrain with varying elevations make it almost impossible to locate and construct rail facilities to the north. Rising mountains south of Crescent City and the Klamath River combine to present the same types of problems to the south of Crescent City for an extension into the Eureka rail head. Neither marketing nor economic demand for rail facilities has reached a stage in Del Norte County to warrant a study for the purpose of linking the Grants Pass and Eureka rail heads.

Public Transportation

A proposal to study public transportation has been advanced in the Regional Transportation Plan. The study as outlined, suggested a minimal service of twice a week to outlying communities within the County along with daily service within the core area of Crescent City. The several alternatives for implementing this proposal are currently being considered by the Local Transportation Commission. The Regional Transportation Plan's public transportation section is included as part of this element and is as follows.

Greyhound Bus Lines provides service several times daily into and out of Del Norte County. Scheduling makes it of minimal value for conducting business or shopping within the normal business hours. There is one taxi company which operates in Crescent City. It has two taxis, with a total daily ridership of between 25 and 40 passengers.

Concern has been expressed over the possible need for some form of public transportation system for Del Norte County by members of the Del Norte County Local Transportation Commission (LTC), the Technical and Citizens Advisory Committees, Chamber of Commerce, and Community organizations. Accordingly, the LTC adopted regional transportation goals and objectives which support such development. Specifically, one objective states "special consideration should be given to the travel problems of the aged, youngsters, low income, and non-driver citizens to insure that they have ample opportunity for full use of a transportation system."

Written communications and response at Advisory Committee meetings have indicated that the expressed need concerning public transportation within the County is to bring persons from the outlying areas in the County into Crescent City for shopping, medical attention, recreation, and educational purposes.

Functional Classification of public transportation is a method developed by Caltrans of categorizing public transportation systems according to the character of service they provide. The four main categories are: Interregional, Regional, Local, and Feeder service, each with two subcategories - Exclusive Right of Way and Non-exclusive Right of Way. The criteria for determining these categories are defined as follows:

Interregional is that transit system composed of routes which tie together "regions"* and centers of population and economic activity and connect them to the rest of the State and Country. The combination of interregional routes forms a statewide system.

Regional systems provide service which operates wholly within a region linking the residential communities, commercial, service, and industrial activities of an area. Service may be between city pairs within a region, or may traverse several cities within a metropolitan area.

Local service transit systems operate within a community or sub-region providing travel service of a circulatory nature, making frequent stops over a net work of routes to pick up or discharge passengers. Distance between stops is typically under one mile.

Feeder service collects passengers from a neighborhood or community along a route and delivers them to an interface with other transportation systems; or the reverse, collecting passengers from an interface terminal or transfer point and distributing along a route in communities or neighborhoods.

* The identification of "regions" connected by public transportation is intended to describe population concentrations which have their own unique

densities, living patterns, social conditions, economic, political, etc., characteristics and are spatially separated by substantial distances and trip time.

The subcategories may be defined as:

Exclusive right of way transit is the conveyance of persons from one place to another in vehicles which operate over their own exclusive grade-separated right of way.

Nonexclusive right of way transit is the conveyance of persons from one place to another in vehicles that operate on shared right of way.

The functional classifications of public transportation systems in Del Norte County are as follows:

Transit Operator
Greyhound

Functional Classification
Interregional - Nonexclusive R/W

The taxi companies have not been functionally classified.

Further study is required prior to making a finding concerning the existence of unmet public transportation needs in the Region.

At the present time the best method available for determining the need for a public transportation system is in the implementation of a demonstration regional bus system as outlined under "Recommended Plan".

The overall performance and use of the system should be closely monitored during the demonstration period and the results then analyzed and used to determine the need for the continuation of the system.

The estimated cost of the system is approximately \$20,000 per year, or \$30,000 for the 18 month demonstration period being recommended in this Plan. This is based on an estimate of \$12 per vehicle operating hour. These costs are estimated to be 21% capital outlay, 52% operations and maintenance, and 27% administration.

Assuming an average of three passengers per operating hour, the system could be expected to serve 5,000 passengers per year. The potential revenue to be derived from a public transportation system is dependent, of course, upon the fare structure.

A regional public transportation system should be implemented in Del Norte County as a demonstration project for approximately 18 months to allow for user adjustment and seasonal variation. During this time, the actual demand for public transportation could be determined. The system should experiment with service areas, service times, service frequencies, etc., to determine potential usage of the demonstration system and should allow a determination to be made as to whether or not there are any unmet regional public transportation needs which can reasonably be met, and thus a decision can be made to continue or discontinue the service.

A scheduled, fixed route system should be developed to serve as a minimum, the communities from Gasquet and Ship Ashore area in the northern part of the Region to Klamath Glen in the southern part.

The following proposed system, which provides service two days per week for the following routes, was used to estimate cost, equipment and ridership. Exact locations of passenger terminal facilities along the various routes should be determined during detailed system design.

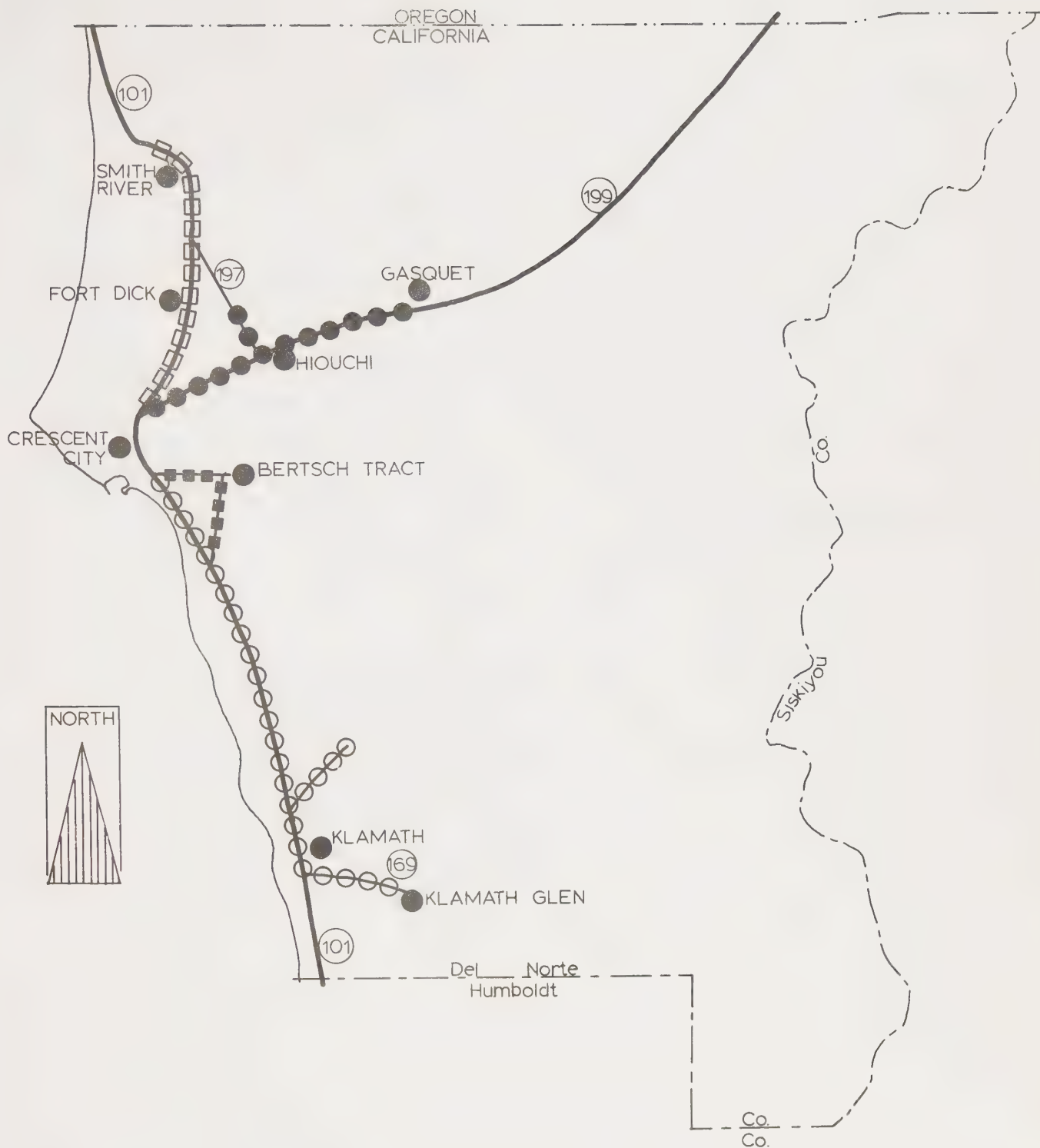
<u>Route 1</u>	Crescent City Loop Hunter Creek Road Klamath Klamath Glen	2 round trips per day serviced, 2 days per week.
<u>Route 2</u>	Crescent City Loop Fort Dick Smith River Ship Ashore Area	2 round trips per day services, 2 days per week.
<u>Route 3</u>	Crescent City Loop Bertsch Tract	2 round trips per day serviced, 2 days per week.
<u>Route 4</u>	Crescent City Loop Hiouchi-Golf Course Area (Rte. 197) Gasquet	2 round trips per day serviced, 2 days per week.

Two 10 to 14-passenger van or minibus type vehicles would be required. The vehicles should be airconditioned not only for driver and rider comfort, but also for resale value if the system is discontinued. They should also be equipped with two-way radios to provide communication with a central office. Consideration should be given to equipping the vehicles for use by the handicapped. The vehicles should be attractive, easily identifiable and comfortable. The funding and operation of the system should be multi-jurisdictional, utilizing a Joint Powers Agreement involving the County of Del Norte and Crescent City. It is recommended that the County of Del Norte be considered the lead agency and that it be authorized to provide day by day control of the system receiving guidance from Crescent City. This would include determining the routes, schedules, and fares. It is also recommended that the operating services be contracted with private enterprise.

Prior to implementation of a system or during the first few months of its operation, firm criteria should be established upon which to make a decision as to whether or not a particular system or portion of a system should be continued. "Success" criteria should be determined by the members of the Joint Powers Agreement and the Local Transportation Commission.

The future of public transportation in Del Norte County will undoubtedly relate to the results of this demonstration program, if implemented. Although need is, at the present time, unquantified,

every effort should be made to make this project a success in order to (1) meet the needs of the transit dependent in the Region and (2) provide a base for future planning. Although the Del Norte County Local Transportation Commission has no direct funds for implementation of a public transportation system, or any other transportation facility, its support, guidance, and recommendations should guide the local agencies in the development of a coordinated and balanced regional transportation system.



- | | |
|-----------|---------|
| OOOOOO | ROUTE 1 |
| □□□□□ | ROUTE 2 |
| ■ ■ ■ ■ ■ | ROUTE 3 |
| ● ● ● ● ● | ROUTE 4 |

DEL NORTE COUNTY, CALIF

REGIONAL PUBLIC TRANSPORTATION SYSTEM



SCALE IN FEET
1000 500 0 1000 2000

DEL NORTE COUNTY, CALIF.
**REGIONAL PUBLIC
TRANSPORTATION SYSTEM**

A P P E N D I X

Functional Classification

Functional classification is a way of describing the purpose of each highway, road, or street in accommodating travel. It provides a uniform evaluation of the service provided by the facility which recognizes travel needs and land access requirements. Briefly the classifications described below are as follows:

Rural

- Principal Arterials
- Minor Arterials
- Connectors
- Collectors
 - Major
 - Minor
- Local

Urban

- Principal Arterials
 - Type I
 - Type III
 - Type IV
- Minor Arterials
- Collectors
- Local

The Rural Principal Arterial system consists of a connected rural network of continuous routes which have trip length and travel density characteristics indicative of substantial statewide or interstate travel.

The Rural Minor Arterial road system should, in conjunction with the rural principal arterial system, link cities and towns above 5,000 in population (and other traffic generators, such as major recreational areas) and form an integrated network providing interstate and intercounty service.

Rural Connectors provide connections between the higher order systems and have low-volume/long-trip length characteristics.

The Rural Collector routes generally serve travel of primarily regional importance rather than statewide importance and constitute those routes on which (regardless of traffic volume) predominant travel distances are shorter than on arterial routes. The collector road system is subclassified into two categories:

Major collectors provide intraregional travel service to the towns not directly served by the higher systems and to other traffic generators of equivalent intraregional importance, such as schools, shipping points, county parks and important mining agricultural areas.

Minor Collectors are spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road.

The Rural Local Road system serves primarily to provide access to adjacent land and provides service to travel over relatively short distances as compared to collectors or other higher systems.

The Urban Type I Principal Arterials serve as the urban extension of the rural arterial system carrying or leaving the urban area. They serve corridor movements having combined trip length and travel density characteristics indicative of substantial statewide or interstate significance.

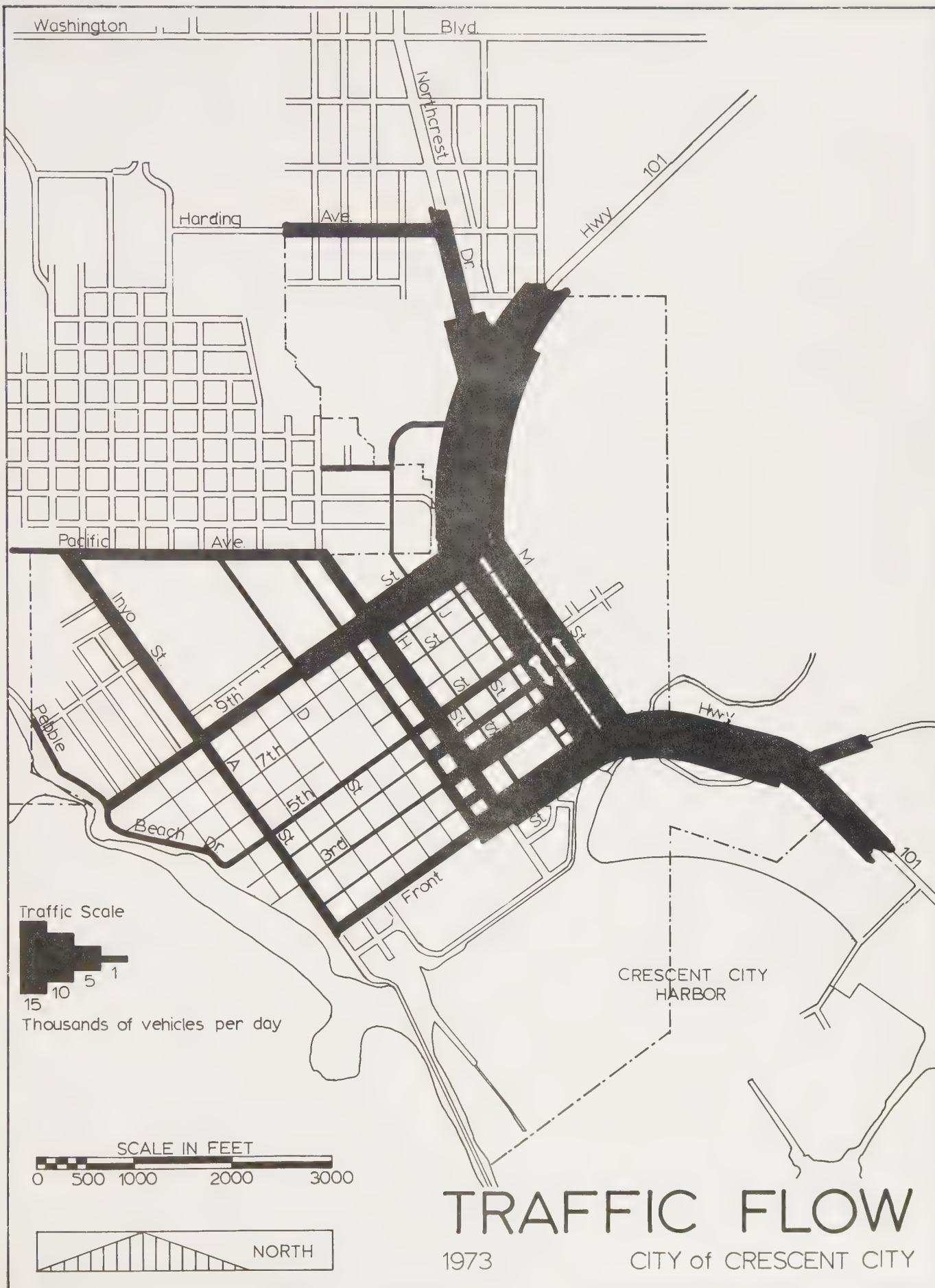
When compared to other arterial facilities, they carry a higher percentage of interregional traffic within the urban area.

Almost without exception, Urban Type III Principal Arterials are found only in the largest urban areas which are metropolitan in character (over one-half million population).

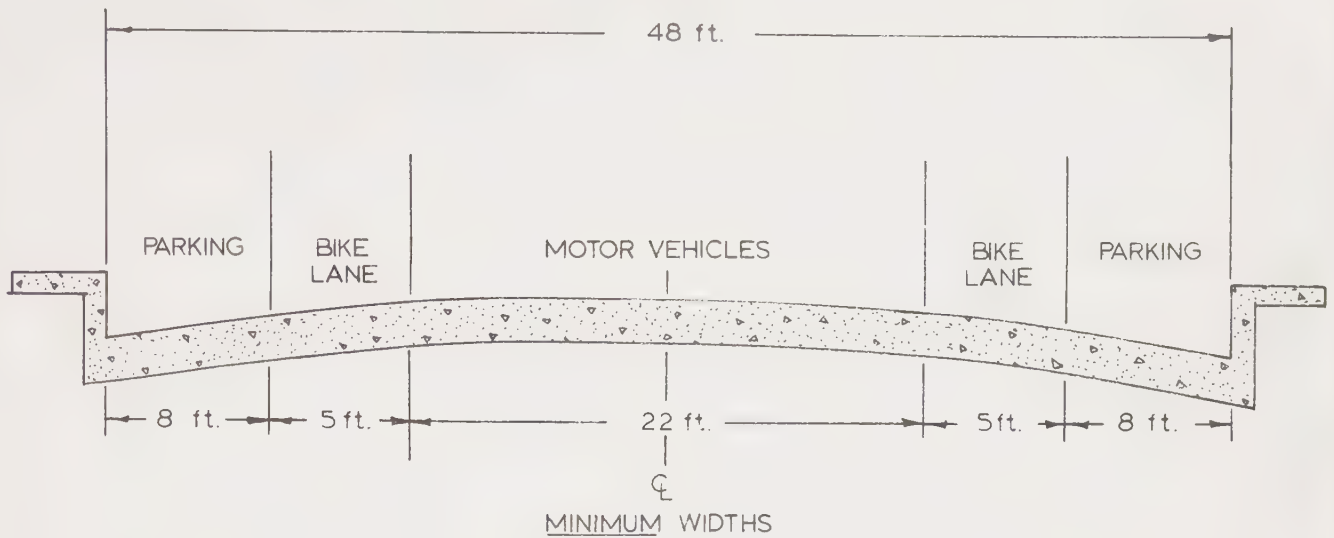
Urban Type IV Principal Arterials, in conjunction with Type I Arterials, provide the highest level of conventional street service to virtually all area traffic generators.

The Urban Minor Arterial system interconnects with, augments, and provides supplemental service to the higher order arterial systems.

The Urban Collector system serves primarily to provide direct access to abutting land and higher order road systems. Through traffic movement usually is deliberately discouraged.

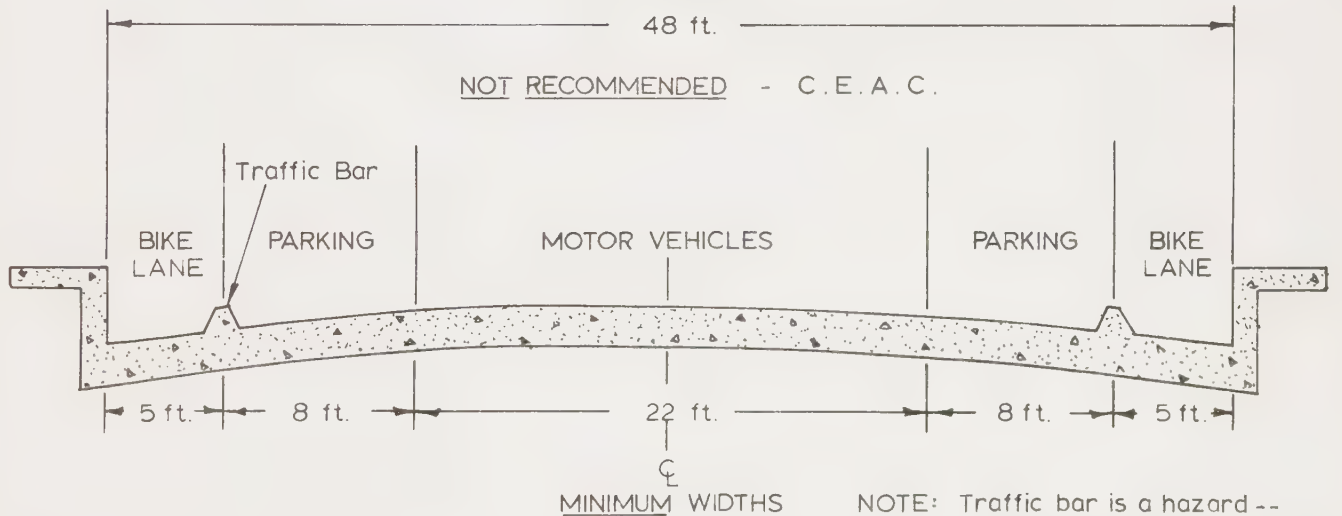


PHASE 1



OR

PHASE 2

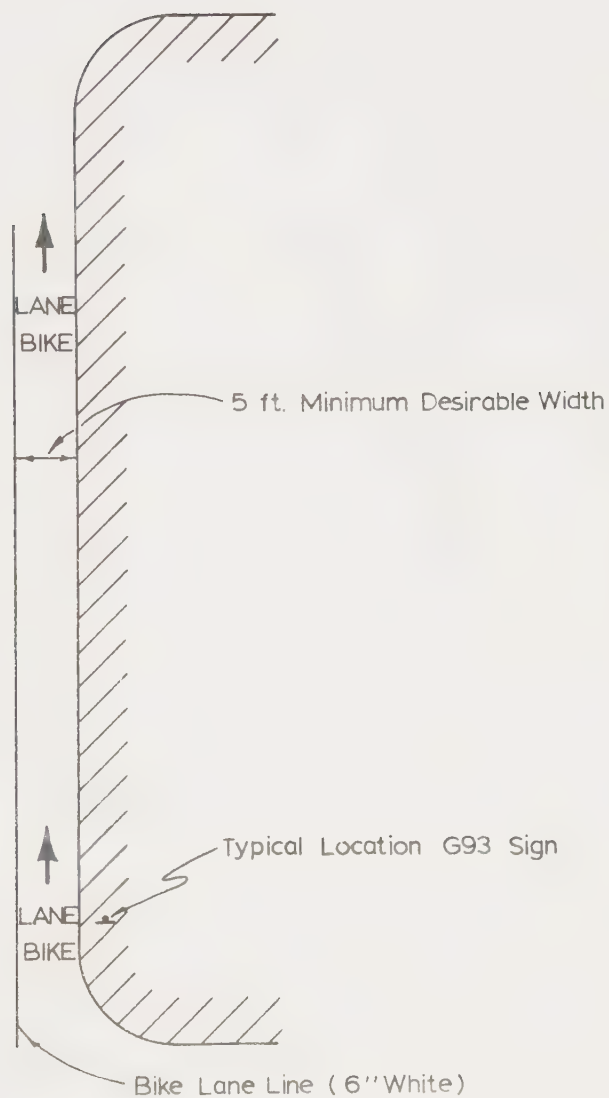
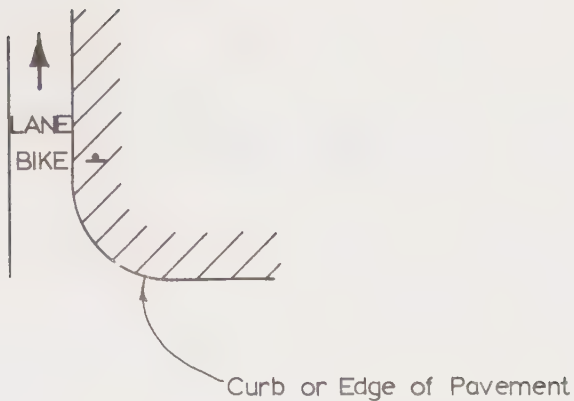


NOTE: Traffic bar is a hazard --
County Engineers Association
of California

CROSS SECTIONS OF RECOMMENDED BICYCLE LANES

GENERAL PLAN - DEL NORTE COUNTY, CALIFORNIA

TYPICAL BIKE LANE MARKINGS



ALTERNATE
LEGEND:

ONLY
BIKE

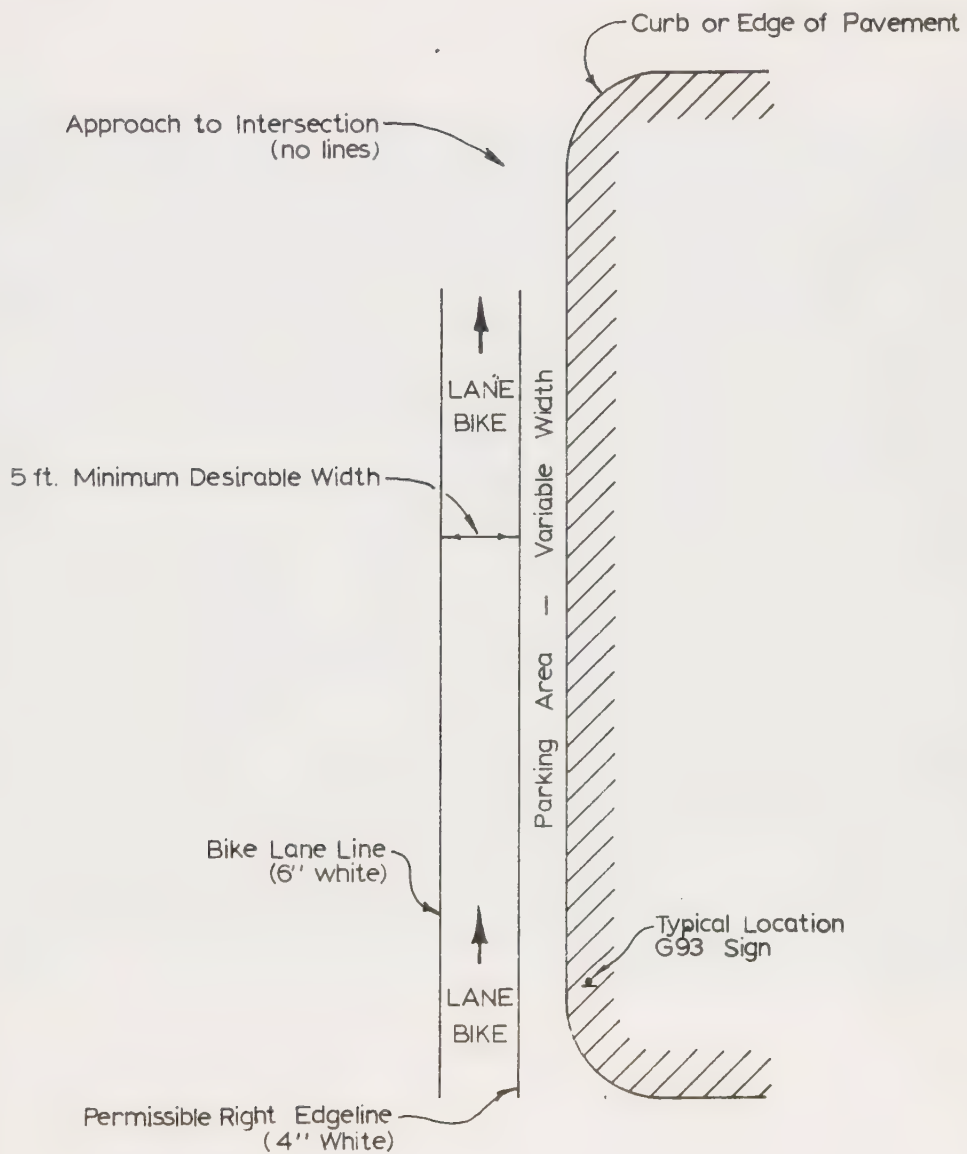
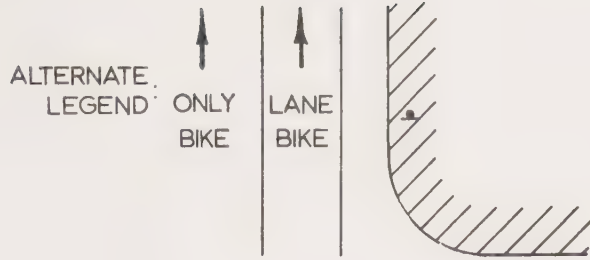


NOT TO SCALE

California Traffic Control Devices Committee
June 1973

PLATE 1

CRS 3/27/76



California Traffic Control Devices Committee
June 1973



NOT TO SCALE

PLATE 2

TYPICAL BIKE LANE MARKINGS

SCENIC HIGHWAYS



Introduction

In 1963, the State Legislature created and established the California Scenic Highways programs, together with a Master Plan for State Scenic Highways. The Scenic Highways Element of the General Plan, "for the development, protection, and establishment of scenic highways," technically responds to the provisions of this legislation and applies to those state routes designated as eligible on the Master Plan (see figure 1). To date, few eligible routes have been designated by local governments and approved by the state, due to factors of ambiguous program criteria, complicated review procedure and lack of incentives. (The only benefits derived by local government and residents are the signing of the route, mention in any publication on scenic highways and possible consideration for rest and information areas.)

The Scenic Highways Program established the Scenic Highway Advisory Committee. This committee consists of seven members appointed by the Governor. Their responsibilities include recommending program criteria, reviewing applications for and recommending approval of, official scenic highway designations. The State of California Department of Transportation (Caltrans) was delegated the responsibility of administering and coordinating the scenic highways program and for officially designating highways as scenic highways.

Before a route can be designated as an "Official Scenic Highway", the following basic steps must be taken:

1. The State Legislature must enact legislation to include State routes in the Master Plan of State Highways Eligible for Official Scenic Highway Designation. This step only identifies those routes which are eligible to be designated a scenic highway and does not infer actual designation.
See figure #1.
2. The legislative body having jurisdiction over lands adjacent to an eligible scenic highway must request by resolution to the District Director of Transportation (Caltrans), that a corridor survey and a highway facility study be made. Prior to requesting the District Director of Transportation to do this, the local agency should have adopted a scenic highway element of their general plan as required by Subsection (H) of Article 5, Section 65302 of the Government Code. Following the request by the local jurisdiction, the Scenic Highway Advisory Committee will review the requested route portion to determine the advisability of proceeding with the Corridor Survey. If it is determined by the Advisory Committee that the route has natural scenic merit with good potential for official designation, the District Scenic Highway Coordinator will be so advised and will coordinate and conduct the survey and study. The two will be combined into the Scenic Highway Report.
3. The procedure for achieving official designation of scenic highways includes the requirement that local jurisdictions adopt a plan and program to protect and enhance the scenic appearance of the corridor. The minimum requirements which must be met by the local jurisdiction include, but are not limited to: (1) regulation of land use which may include density and/or the intensity of development; (2) detailed land and site planning; (3) control of outdoor advertising; (4) careful attention to and control of earthmoving and landscaping; and (5) the design and appearance of structures and equipment. The involvement of local citizens in determining the five items is very important if the program is to have popular support.

County Scenic Highways

County roads and highways designated as "scenic" in the local general plans and protected as such by local ordinances may be designated as "Official" and receive the appropriate scenic highway signs by application of the County Board of Supervisors to the State Director of Transportation, who must

Figure 1



ROUTES DESIGNATED BY THE
STATE MASTER PLAN FOR
SCENIC HIGHWAYS

find that the corridor standards adopted for official State Scenic Highways have been met. All standards prescribed in this guide for State Scenic Highways shall in this case apply equally to County Scenic Highways. The Transportation District Scenic Highway Coordinator will be available, upon request, to consult with the local jurisdiction regarding the program and to review the corridor survey and the highway facility study that have been prepared by the local jurisdiction.

Revocation of Designation

The Department of Transportation may review the adopted scenic routes and their corridor protection program. The Department, with the advice of the Scenic Highway Advisory Committee, may revoke the designation of the highway as an Official State Scenic Highway and remove the signs if it feels the corridor program no longer adequately insures the maintenance of the scenic qualities of the route.

Goals

The goals for a scenic highway designation for routes 101, 197, and 199 in Del Norte County are to:

- (1) Preserve and enhance the quality of life in Del Norte County for present and future generations of citizens.
- (2) Increase the appreciation of local residents for their natural environment.
- (3) Preserve the scenic qualities of the county thereby assisting in stabilizing and/or increasing property values of individual property owners and the public investment in publicly owned property.
- (4) Promote the tourist industry.
- (5) Preserve and enhance the "image" of the County.
- (6) Encourage the improvement of these basic arterials.
- (7) Provide continuing recreational and commercial use of these highways and the areas they pass through.

In order that the above goals may be accomplished, any corridor, study requested by the County, shall include a listing of the sections of highways to be improved, including the date of improvement. The acceptance of the County of a corridor study will be contingent upon this listing and the County will reserve the privilege of designating only those sections upon which improvements have been made after the improvement is completed.

Scenic Corridor Study

A scenic Corridor Study for sections of highways 101, 197, and 199 in Del Norte County shall address but not be limited to the following:

- 1) Improvements of the highway including type and completion date.
- 2) Elimination of any historic public access.
- 3) Vista points, wayside and roadside rests, day use facilities and turn outs.
- 4) Impact of "Scenic" designation upon future improvements and the use of public and private property.

- 5) Economic impact.
- 6) Off-site and on-site advertising and any aquisition program.

Until a specific corridor study is developed as described in the section titled Scenic Corridor Study, the County should regulate the continued uses of the scenic highways, as designated by the State Master Plan, through the use of the County's building, set-back, sign, and other ordinances with particular emphasis upon the sign ordinance as it relates to Federal Aid Primary Routes. Upon the completion, acceptance, and adoption of the Scenic Corridor Study, as described above, the County may adopt the following policies for those segments of the route designated scenic highway:

Policies

The County should continue the maintenance and enhancement of the scenic qualities of Routes 101, 197, and 199, while insuring the improvement of these routes and the economic viability of the area they serve.

- 1) Construction standards along these routes should be as consistent as is feasible, with the topographic and scenic character of the lands through which they pass.
- 2) Residential development adjacent to or readily visible from these routes should be based on the principle of maintaining and/or enhancing native growth which is visible from the route and between the route and the development.
- 3) Outdoor advertising should be restricted on these routes:
 - a) The signs should be sufficient in size to describe or indicate the service available.
 - b) Off-site signs should be restricted to commercial or industrially zoned areas.
 - c) The signs should meet or exceed the requirements of the County sign ordinance.
- 4) Land use regulations within the scenic area will be consistent with the policies of the General Plan.
- 5) New or relocated utility lines should be placed underground whenever feasible. Utility lines which are in an area where underground placement is not feasible, shall be aligned so that the lines do not interfere with natural scenic resources or the visual environment.
- 6) Timber harvesting will not be eliminated from the scenic area. Selective cutting or thinning should be encouraged, however, patchwork clear cutting to topography may also be considered.

Implementation

The degree of success of this plan will depend upon the public's acceptance of it and the implementation measures utilized. The basic levels of participation from which the County may choose are listed below:

1) Direct Action

A. Acquisition of full legal title to prime scenic corridor land is the most effective and the most expensive way of preserving the quality of scenic highways.

1) Acquisition by purchase can be accomplished by the following:

- a) Outright purchase and immediate full payment.
- b) Installment purchase with seller retaining possession of the property until the completion of sale.
- c) Purchase of tax sale property.
- d) Purchase of excess land of other public agencies at original cost plus interest.

2) Condemnation (legally questionable method of acquiring scenic land)

3) Subdivision dedication.

4) Donations of land by adjacent landowners. (1)

B. Acquisition of less than full ownership, easements. (2)

An owner may sell the right to use of his property in the form of an easement. There are two types of easements: 1) positive, in that it allows an activity to be undertaken (bicycle path, right-of-ways). 2) negative, in that it restrains the owner from forms of development. In theory, easements are a small cost compared to full-fee acquisition, however, in many cases the cost may approach out-right purchase.

- 1) Conservation easements remove part or all development rights.
- 2) Scenic easements regulate the use of land to insure reserving scenic views.
- 3) Recreation easements allow public entry.

(1) Donations can be received expressly for Scenic Highways under Section 155 of the Streets and Highways Code.

(2) The County may accept grants of Open Space easements on privately owned land under Sections 51050-51065 of the Government Code.

C. Other

- 1) Public Purchase and then lease back to owner.
- 2) Purchase with owner retaining use of property until his death.

2. Regulation

A. Ordinances

- 1) Existing ordinances - Through the application of existing zoning, sign building, streets and roads and subdivision ordinances effective control of land use activities, setbacks and densities is possible with County designation and state acceptance of a scenic corridor.
Existing ordinances and be applied to insure the control of outdoor advertising and land use densities.

2) Proposed Ordinances

- a) Architectural Design Zone - An overlay.
The development of this zoning classification would provide a review of the plans of the proposed development to insure that the development would aesthetically blend with the surrounding.
- b) Scenic Corridor - An overlay.
This overlay could be created and applied within the boundaries of the adopted scenic highway corridor. In overlay zoning, the existing zoning still applies in addition to the regulations of the overlay zone. The establishment of this zone would recognize the importance of the recreational and economic benefits to be derived from the protection and enhancement of the sections. The zone could regulate off-and-on premise signs, location of overhead utility lines, screening certain land uses, and limited control of earthmoving operations.

3. Tax Incentives - these incentives are limited in nature and apply primarily to the Williamson Act and land donations for tax purposes.

4. Voluntary Action - voluntary action can be of the following:

- A. Restrictive Covenants - adjacent landowners bind themselves to use the corridor land in a way compatible to the highway scenic corridor program.
- B. Land Trusts - donated land administered for the public interest by a self-perpetuating board, not subject to government regulation.
- C. Voluntary "Scenic Lands" Committee - a local committee which would make suggestions to landowners and developers to maintain the scenic value of the corridor.

The following section is not to be interpreted as part of a scenic corridor program.

County Scenic Drives

The intent of a County Scenic Drive Program is to identify a scenic drive along county roads which would tie in to city streets and the State proposed scenic routes. (County roads may not be designated as Official County Scenic Highways unless requested by the County Board of Supervisors and after the State Director of Transportation has determined that all necessary requirements have been met).

Goals

The goals for the Scenic Drive Program in Del Norte County are to :

- 1) Increase the appreciation of local residents for their natural environment.
- 2) Promote the tourist industry.
- 3) Preserve and enhance the "image" of the County.
- 4) Encourage the improvement of these county roads.

Scenic Drive

A county scenic drive can help to promote the tourist industry of Del Norte County in that it can provide an attraction which will encourage the visitor to spend some additional time in the area. The scenic drive can provide the method whereby the

visitors will become better acquainted with the County, its residents, and our way of life.

The County scenic drive program can be accomplished in steps over a long period of time:

- 1) Designating a scenic drive.
- 2) Identifying the scenic drive in all tourist related publications.
- 3) Signing of the route (with a style of sign as to make the drive an attraction, such as the 49 mile scenic drive of San Francisco).
- 4) Interpretive services to enhance the sightseeing value.
- 5) Picnic sites.
- 6) Roadside rests.

Steps 1 through 3 can be accomplished with relatively minimal expense, and could provide the basis for the Scenic Drive Program. Steps 4 through 6 would be future improvement objectives.

Policy

The County should continue the maintenance, enhancement, and promotion of the scenic qualities of the local county roads.

Implementation

Following designation of a county road as a County Scenic Drive, the County should implement a program of maintenance of the scenic drive through:

- 1) The County's zoning, sign, building, street, road and subdivision ordinances.
- 2) Coordination with the other elements of the County General Plan.

Scenic Drive

The following route is recommended for recognition as a scenic drive:

Ocean View Drive (D5)
Indian Road
Mouth of Smith River (D6)
Ocean View Drive (D5)
Sarina Road
First Street
Fred Haight Drive (4)
Lake Earl Drive (D3)
Moseley Road
Lower Lake Road
Lake Earl Drive (D3)
Northcrest Drive (D3)
Washington Boulevard (D1)
Pebble Beach Drive

(See figure #2)

The County Scenic Drive would then tie into a City Scenic Drive (Pebble Beach, 5th, "A" Street, Howe Drive). Future extension of Howe Drive across Elk Creek and then on to the harbor would extend the Scenic Drive route to Anchor Drive creating a continuous scenic drive from the Harbor to the Oregon State line.

Issues

There are two basic issues to be recognized in a Scenic Drive Route on a County level:

- 1) the possibility of increased traffic on rural and residential roads.
- 2) maintenance due to increased traffic, (major resurfacing of Moseley Road would be needed; other roads along the route are adequate).

Examples of Interpretive Services for a County Scenic Drive

There are two basic methods of interpretive services: 1) displays located at key turnoff points and 2) a numbering system accompanied by a key map with explanations. Display services are relatively expensive in comparison to a numbering system and guide map, however, the display system is a more attractive feature.

Display Systems

These displays would be similar to those found at rest stops along major freeways and those located adjacent to Highway 101 within the Redwood National Park. While these types are attractive and sometimes elaborate, they are subject to vandalism and could be expensive to construct a number sufficient to attract tourists.

Self-Guided Tour (Number System)

This type of system would involve posting, with small attractive signs, each area along the route which would be of some interest to a non-resident and resident. Each sign would be numbered and the number would refer to a description with a brochure and map available for tourist distribution. The brochure and map could contain descriptions and explanations for such items as the following:

- 1) Commercial activities at the Harbor;
- 2) Explanation of Harbor maintenance problems;
- 3) Tsunami high water marks and explanation of occurrence;
- 4) Tetrapods and Harbor construction;
- 5) Battery Point Lighthouse;
- 6) Brother Jonathan Cemetery
- 7) Wildlife at Castle Rock;
- 8) Point St. George Lighthouse;
- 9) Flora and Fauna of the Crescent City Dunes
- 10) Wildlife of Lakes Earl and Talawa;
- 11) Agricultural production of Smith River bottom land;
- 12) The Smith River;
- 13) The Rowdy Creek Fish Hatchery;
- 14) Easter Lily production;
- 15) Mouth of the Smith River;
- 16) Flora and Fauna of Prince Island.

Figure 2



PROPOSED COUNTY
SCENIC DRIVE

Other items to be covered between these points would be vista points, native wildlife and plants, historical descriptions, and access points to local attractions. This list could be as long as deemed necessary to be informative and an attraction to the tourist trade.

Financing could partly be paid for by ads for local business on the reverse side of the brochure, bordering a map. Distribution of the map and brochure could be done by the Chamber of Commerce and its members and/or by setting up visitor information booths at the entrances to Del Norte County.

NOISE



Introduction

California Government Code (1) requires a Noise Element to address in quantitative, numerical terms, contours of present and projected noise levels associated with all exsisting and proposed major transportation systems. In Del Norte County there are two sources of transportation oriented noise sources; vehicular traffic on Routes 101, 169, 197 and 199 and air traffic in the vicinity of the Del Norte County Airport. Other areas of concern are stationary noise sources or localized noise operation near or adjacent to noise sensitive areas (hospitals, schools, resthomes, etc.).

(1) California Government Code. Section 65302, g.

Measuring Noise

Noise is a combination of three variables: intensity, frequency and duration. Intensity is perceived as loudness while frequency is the number of sound waves per second produced by the vibrating body, which is perceived as the pitch. Duration is the extent of time during which the sound is perceived. In considering the effects of noise, it is desirable to have a measurement which will incorporate all three factors.

Current technology provides the technique and instrumentation to qualify noise. A sound level meter, consisting of a microphone, attenuator, amplifier, and indicator, measures the two most significant properties of noise: intensity and frequency. To measure the intensity of sound and decibel, or dB, is used. This is a measure of sound pressure and may be thought of as the loudness of the sound. Figure 1 contains a sampling of various types of noises and their noise levels expressed in dB. It should be noted that the decibel scale is logarithmic, rather than linear, therefore an increase of 10 dB indicates a doubling of the perceived sound.

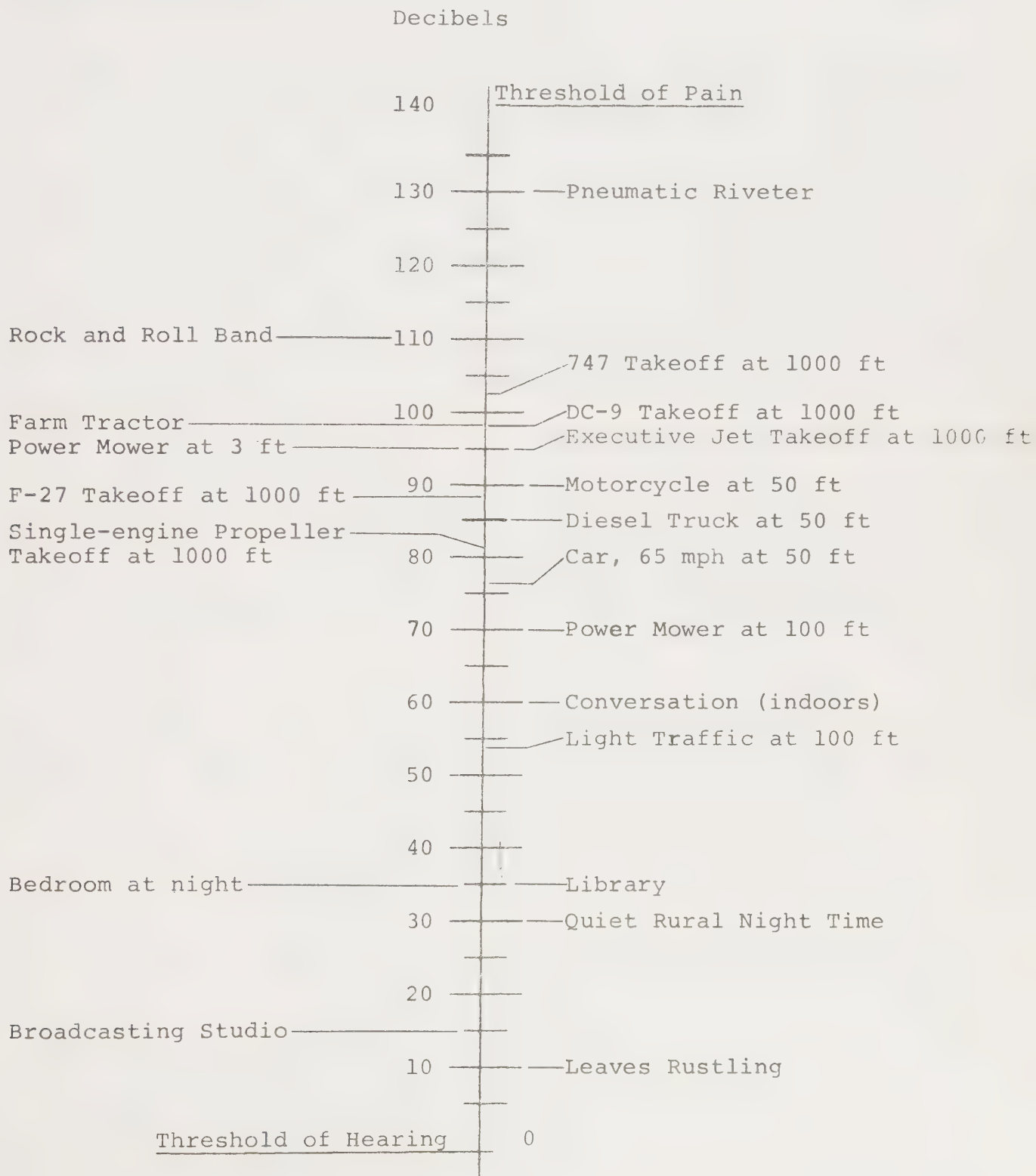
Since the human ear is sensitive to only those sounds that produce frequencies of from 20 cycles per second to 20,000 cycles per second, an "A" - weighting is used to measure only those noises sensitive to the human ear. The "weighting" of the noise reading, results in a single figure, appearing in an abbreviated notation, dB(A).

Of the three factors, intensity, frequency and duration, the latter is the more difficult to assign a value. Noise levels vary over time. They can be very loud for short intervals and relatively soft for longer periods. To compare noise levels that fluctuate an averaging technique must be used. A number of strategies exist to "average" individual readings of varying noise levels into one reading which accounts for the noise impact over a period of time. The terminology used to describe noise fluctuations is :L10, L50, L90. L50 indicates a noise level that is exceeded 50% of the time, and average noise level L90 is a noise level that is exceeded 90% of the time, a noise level which exists at any given time regardless of source. L10 is a noise level that is exceeded 10% of the time, or a peak noise level. These L10, L50, and L90 designations are combined with a dBA level to describe the noise level. For freeway and highway noise being generated by vehicular traffic, the L10 designation is used. L10 75dBA simply means that the noise level of vehicular traffic exceeds 75dBA, 10% of the time for the period under consideration, usually a one-hour interval during periods of peak traffic.

The above method of sound measurement describes sound levels which are relatively continuous in nature with intervals of higher or lower levels of intensity and duration. For those noise levels which occur at regular intervals and the number of operations and the times of occurrence can readily be determined, a different system is used. The Community Noise Exposure Level (CNEL) accounts for these factors and weights noise levels according to the time of day they occur. The CNEL divides the day into three parts: daytime, 7 a.m. to 7 p.m.; evening, 7p.m. to 10 p.m.; and nighttime, 10 p.m. to 7 a.m. This additional

Figure I

APPROXIMATE SOUND LEVELS OF COMMON NOISE LEVELS



weighting to evening and nighttime hours is meant to reflect the typically much lower ambient, or constant, noise level at evening and nighttime hours. This system of noise level measurement is a product of individual measurements which takes into consideration the time at which they occur and makes appropriate adjustments.

There are various other methods of noise level measurement and indicators, however the above described systems are more simplified and will be those used when considering land use implications.

In the assignment of numerical values to noise levels a certain degree of error exists. For example, the L10 level for the highway noise contours does not take into consideration variations due to buildings, barriers, terrain or vegetation and these contours at intervals of 5dBA, are subject to a range of ± 3 dBA. The cost of noise level monitoring for each site along the length of the highways would be prohibitive. Therefore, noise level monitoring can only reflect the general conditions for large areas (although more accurate measurements can be determined for fixed positions) and do not indicate the community's previous exposure to noise or relative degree of individual tolerance.

Understanding Decibel Scales

The A-weighted decibel scale has a built-in allowance for the characteristics of the human ear such that the higher and lower frequencies are not valued as high on the dBA scale as perhaps on a straight dB scale. For example, a sound level which is 80 dB on a non-weighted scale, may have a pitch low enough that it is less objectionable to the human ear and therefore on an "A" weighted scale, register only 68 dB(A).

Because decibels are the result of a logarithmic function, decibel addition is not done by simple mathematical addition. An increase of 10 dB indicates a doubling of the perceived sound. Thus to raise noise levels requires dramatic increases in the noise energy output.

- Examples:
- 1) One stereo speaker may produce 80 dB, however another speaker which produces 80 dB would only increase the total decibel output to 83 dB, (or by 3 decibels).
 - 2) An 80 dB horn added to an existing 90 dB siren would increase the total output level to 90.4 dB.

Understanding Noise Contours

The interpretation of noise contours is a generalized, not an exact science. The measurements by sophisticated instruments are affected by many variables in a particular area. However, these individual effects are generalized so that the noise contour describes the impact that can generally be expected.

Noise contour lines themselves are not specific boundaries of noise tolerance. A contour line denoting a 65 dB(A) limit, does not imply that residents on one side of the line are seriously affected, while on the other side of the line tolerable conditions exist. Rather, the area between 75 dB(A) and 65 dB(A) indicates that residents within this vicinity can usually anticipate a high level of noise, and interference with day to day functions.

Effects of Noise

High noise levels can interfere with a broad range of human activities in a way which degrades public health and welfare. Such activities include:

1. Speech communication in conversation and teaching.
2. Telephone communication.
3. Listening to television and radio.
4. Listening to music.
5. Concentration during mental and physical activities.
6. Relaxation.
7. Sleep.

Interference with listening situations can be determined in terms of the level of the environmental noise and its characteristics. The amount of interference in non-listening situations is often dependent upon factors other than the physical characteristics of the noise. These may include attitude toward the source of an identifiable noise, familiarity with the noise, characteristics of the exposed individual, and the intrusiveness of the noise.

The only well established effects of noise on human health is noise induced hearing loss, either total or partial, permanent or temporary. The primary measure of hearing loss is the hearing threshold level; the level of a tone that can just be detected by an individual. As a person is exposed to increased noise levels he may experience a threshold shift. Lower noise levels are no longer discernible by that individual. A threshold shift can be measured in terms of dBA since 1 dBA is the normal hearing threshold for a normal, healthy individual. If a person experiences a 20 dBA threshold shift, that person can only distinguish noises greater than 20 dBA as opposed to the usual 0-1 dBA threshold of hearing. Exposure to very high noise levels for lengthy periods of time can generate threshold shifts which can be temporary or permanent. In general, A-weighted sound levels must exceed 60-80 decibels before a person will experience temporary threshold shifts. The greater the intensity level above 60-80 decibels and the longer the exposure, the greater length of the temporary threshold shift.

Economic costs of noise can include medical care, loss of efficiency and production, reduction in property value, litigation, abatement measures and increased vacancies. Abatement measures include both those incurred by the noise producer and those residences which experience noise.

In the primarily rural atmosphere of Del Norte County, the impacts of noise are more subtle and less noticeable to the individual affected than those experienced in a more urban area. However, the impact of noise levels on noise-sensitive areas (schools, hospitals, resthomes), on property values and residents in general are effects which must be considered by local government.

Highway Noise

In Del Norte County, Caltrans has provided the County with noise level information for Routes 101, 169, 197, and 199. These noise levels were established by calculating the noise levels from traffic counts and other information for each route. The noise levels indicate both present and projected L10 noise emissions from traffic levels.

Section 65302 (g) of the California Government Code, indicates the mandatory noise element and the basic content required. This section mandates that the noise contours will be broken down into minimum increments of 5 decibels and will be continued down to 65 dB(A). Except for areas involving hospitals, resthomes, long-term medical or mental cases, or outdoor recreational areas, the contours shall be continued down to 45 dB(A).

The following table is a brief description of the range of 65 dB(A) along the four State Routes of the County. A more complete description can be found in Appendix A:

NOISE LEVEL DISTANCES ALONG STATE ROUTES

Route	Description of Area	Average Distance in Feet. Center of Near Lane of Traffic to Range of 65 dBA.	
		Present (1974)	Projected (1975)
101	From Humboldt Co. line to Sandmine Road	217.1	282.89
101	Sandmine Road to McNamara Road (Crescent City)	300.88	485.63
101	McNamara Road to Oregon State Line	172.33	248.63
169	Junction 101 to Simpson Mill Road	122.0	195.0
169	Simpson Mill Road to Klamath Glenn	63.5	108.5
197	Junction 199 to Junction 101	54.5	79.5
199	Junction 101 to Hiouchi	177.75	261.0
199	Hiouchi	172.5	244.0
199	From Hiouchi to Gasquet	150.25	223.5
199	Gasquet	139.0	209.0
199	From Gasquet to Oregon Line	148.83	217.88

As can be seen by the preceding table, the area where traffic noise has its greatest extent is in the area between Sandmine Road and McNamara Road (Crescent City). The more heavily used portion of this section of Highway 101 is illustrated on the three maps and the noise impact area is delineated. (Maps #1-3)

Another source area of high volumes of traffic noise are intersections of these 4 routes with one another. Maps #4-7 illustrate the noise impact areas for highway intersections.

Airport Noise

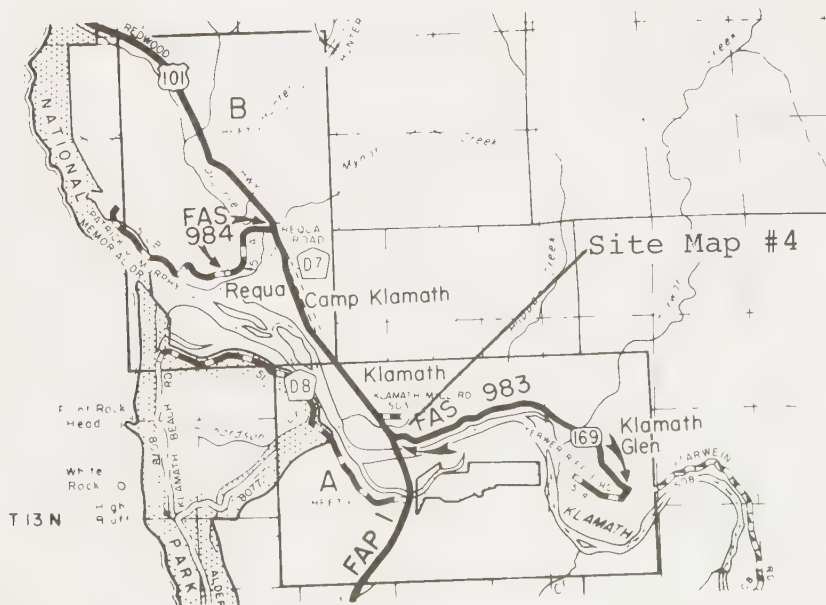
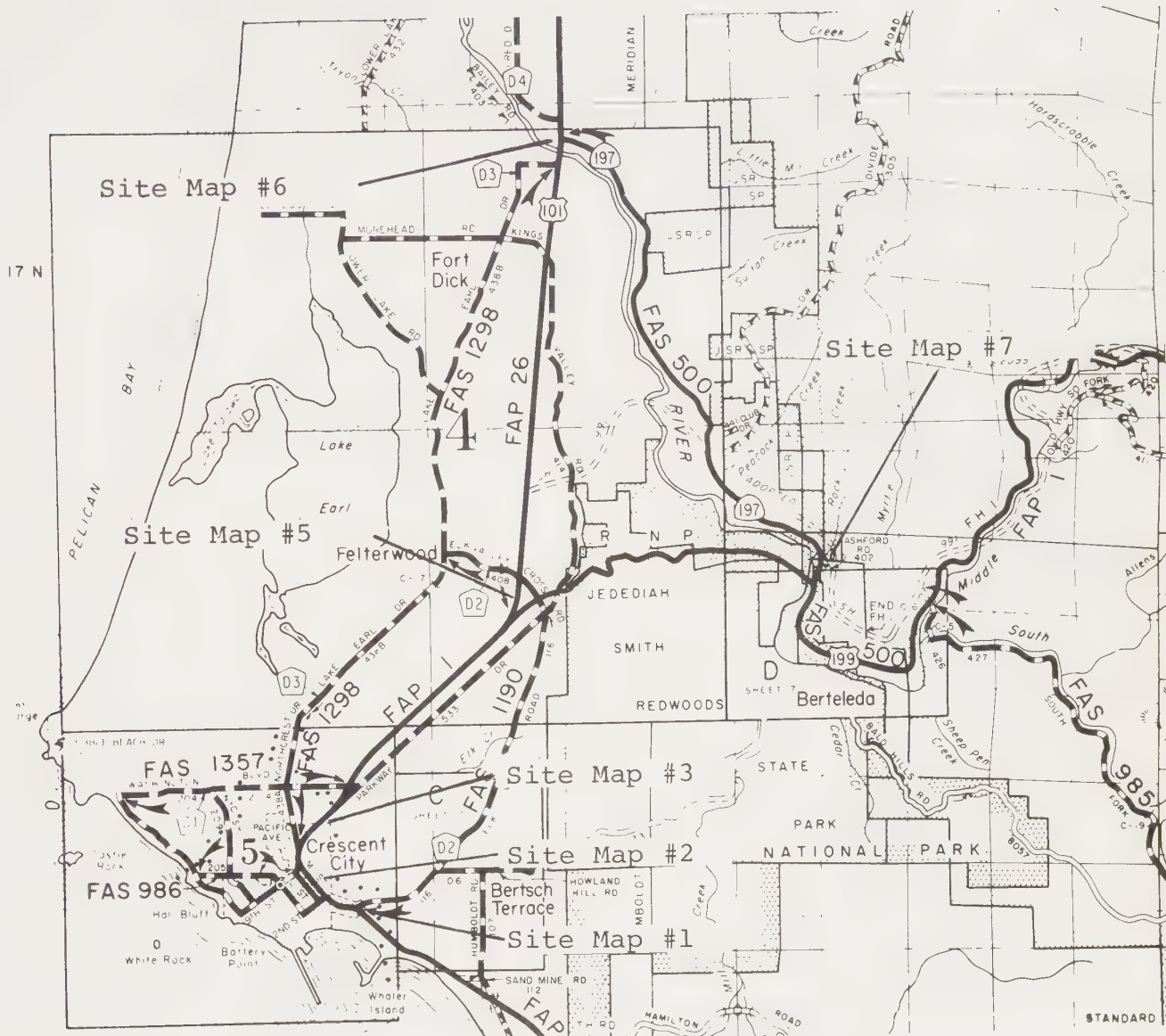
Technical information for the noise contours of the Del Norte County Airport is yet to be developed. Procedures are now underway to have this information supplied to the County by the State Division of Aeronautics in Sacramento. Preliminary investigations indicate that scheduled departures are of aircraft which have minimal noise impact. (See attached map A). Private use involves an executive jet aircraft which generates higher noise levels, however, operation of the aircraft is not on a fixed schedule and use is occasional.

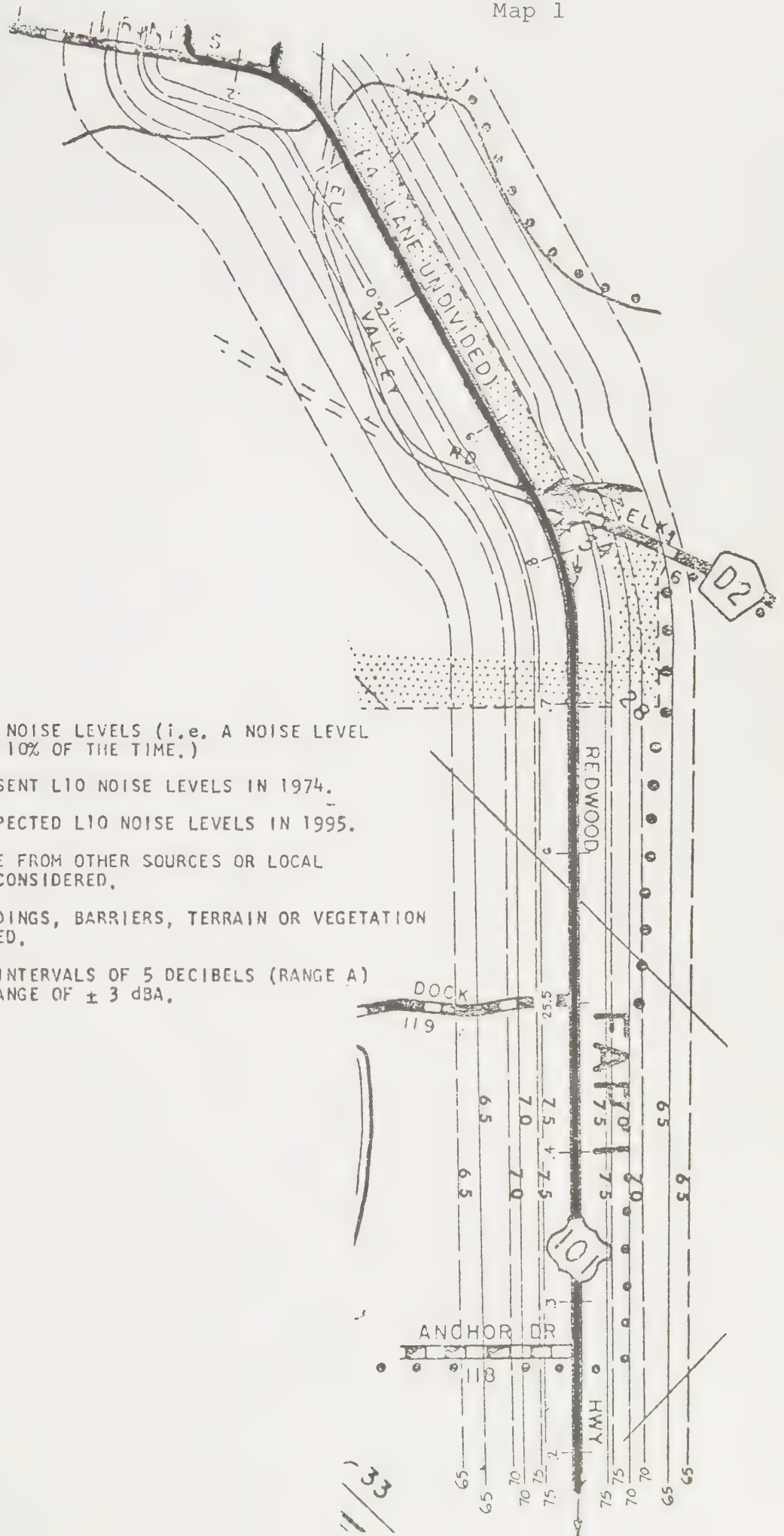
Should jet aircraft be used at Crescent City for commercial flights the noise contours for the area would change dramatically. (See map B) In view of such future possibility, the County should consider the following policies:

1. The establishment of an air corridor zone which would alert citizens of the effects of future jet flights upon the area.
2. Not allowing the construction of any noise sensitive activity (schools, hospitals, etc.) within, or within 1/4 mile of the corridor.
3. Any future lengthening of runways to accommodate commercial jet flights should, if feasible, be extended on the northern ends of the runways to reduce noise impact in the approach area. (See dotted lines for noise contours, map B)
4. Restrict the use of current non-residential land use within the corridor to compatible uses of industrial, commercial, or open space.

Prop-jet aircraft is a definite possibility at the Crescent City Airport. The effect of prop-jets would create noise contours of approximately 1/2 the length of those on map B. The County as a minimum approach should consider the above policies for a prop-jet air corridor.

Index Map





CONTOURS REPRESENT L10 NOISE LEVELS (i.e. A NOISE LEVEL WHICH WILL BE EXCEEDED 10% OF THE TIME.)

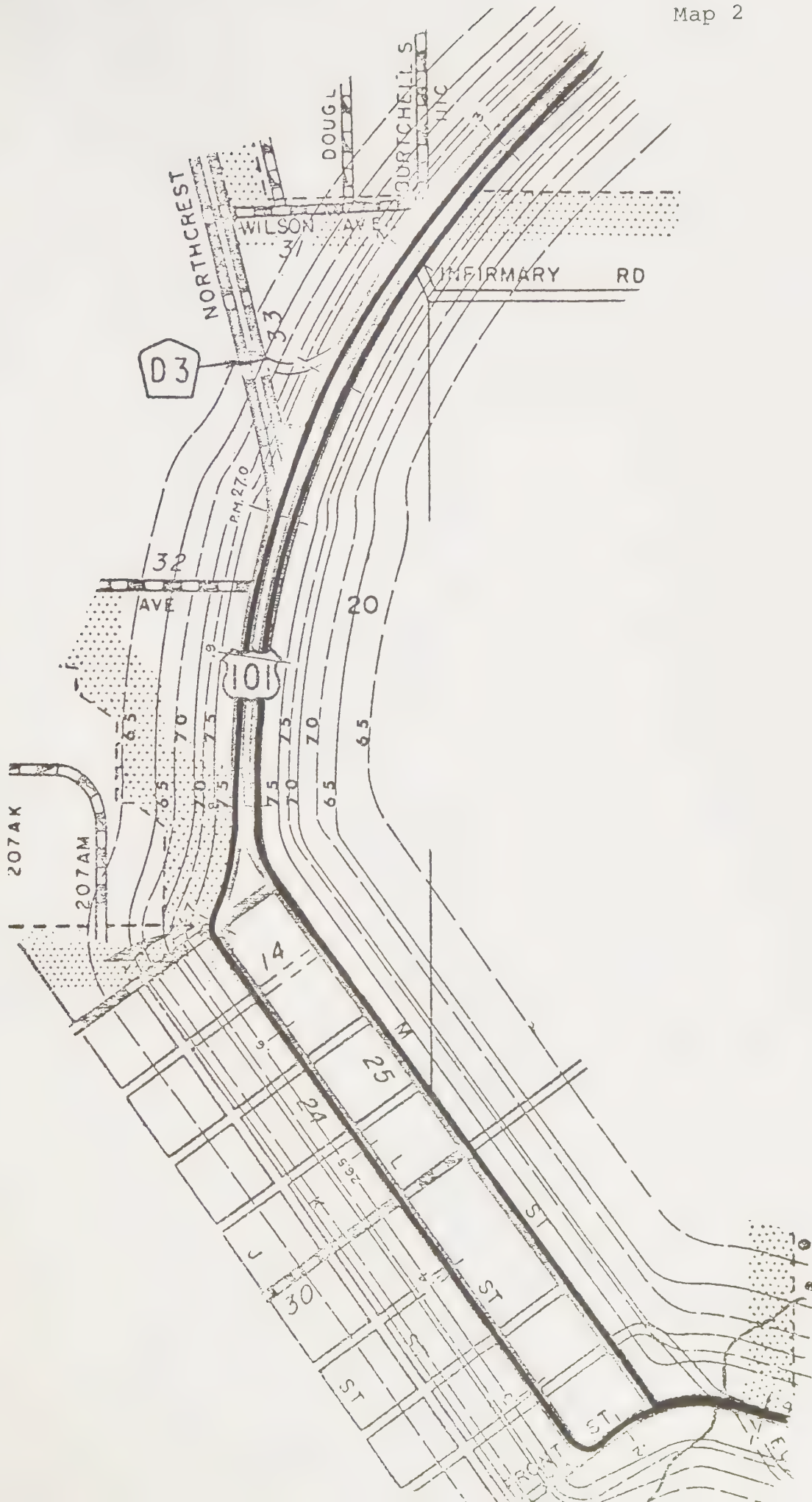
SOLID CONTOURS ARE PRESENT L10 NOISE LEVELS IN 1974.

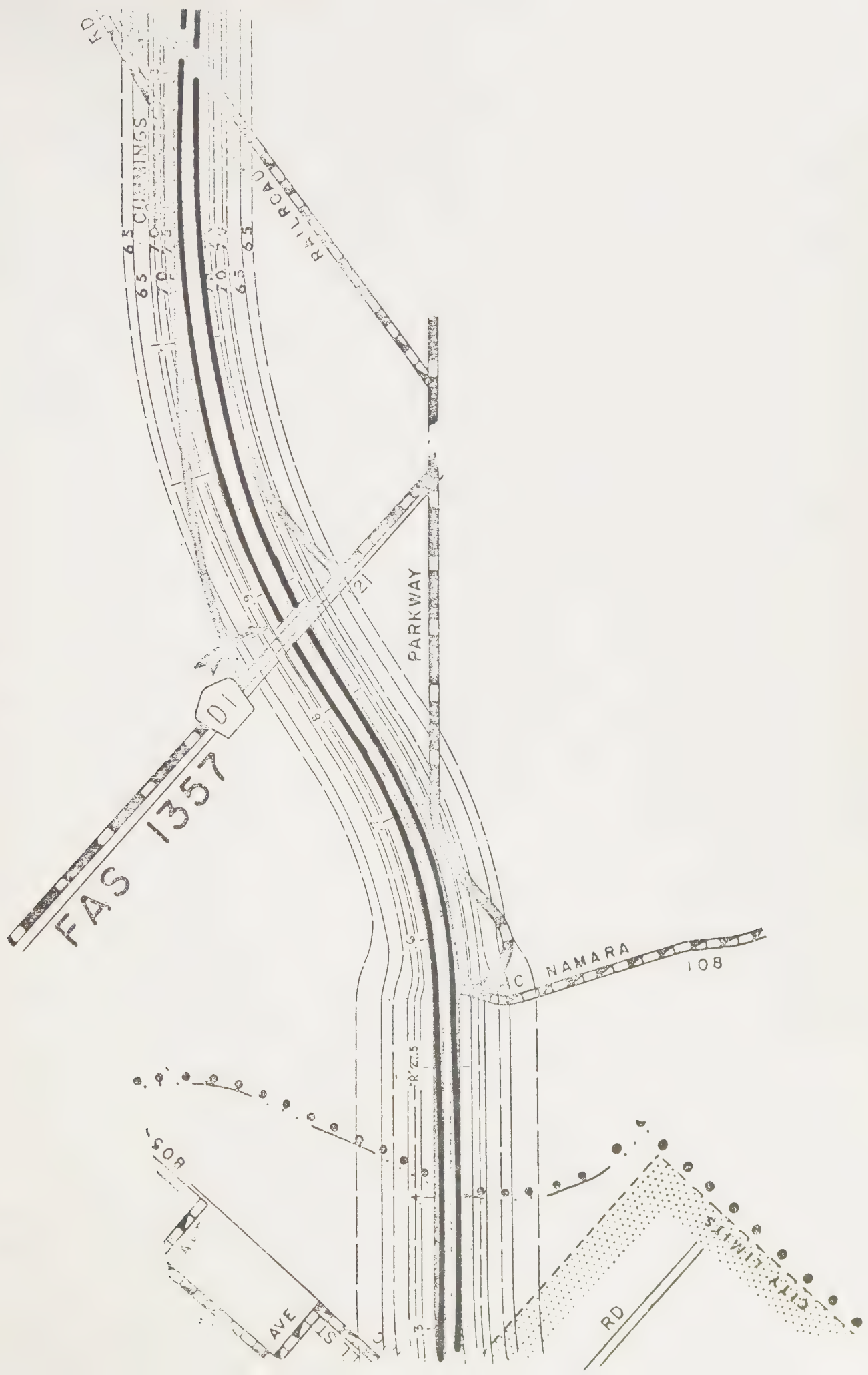
DASHED CONTOURS ARE EXPECTED L10 NOISE LEVELS IN 1995.

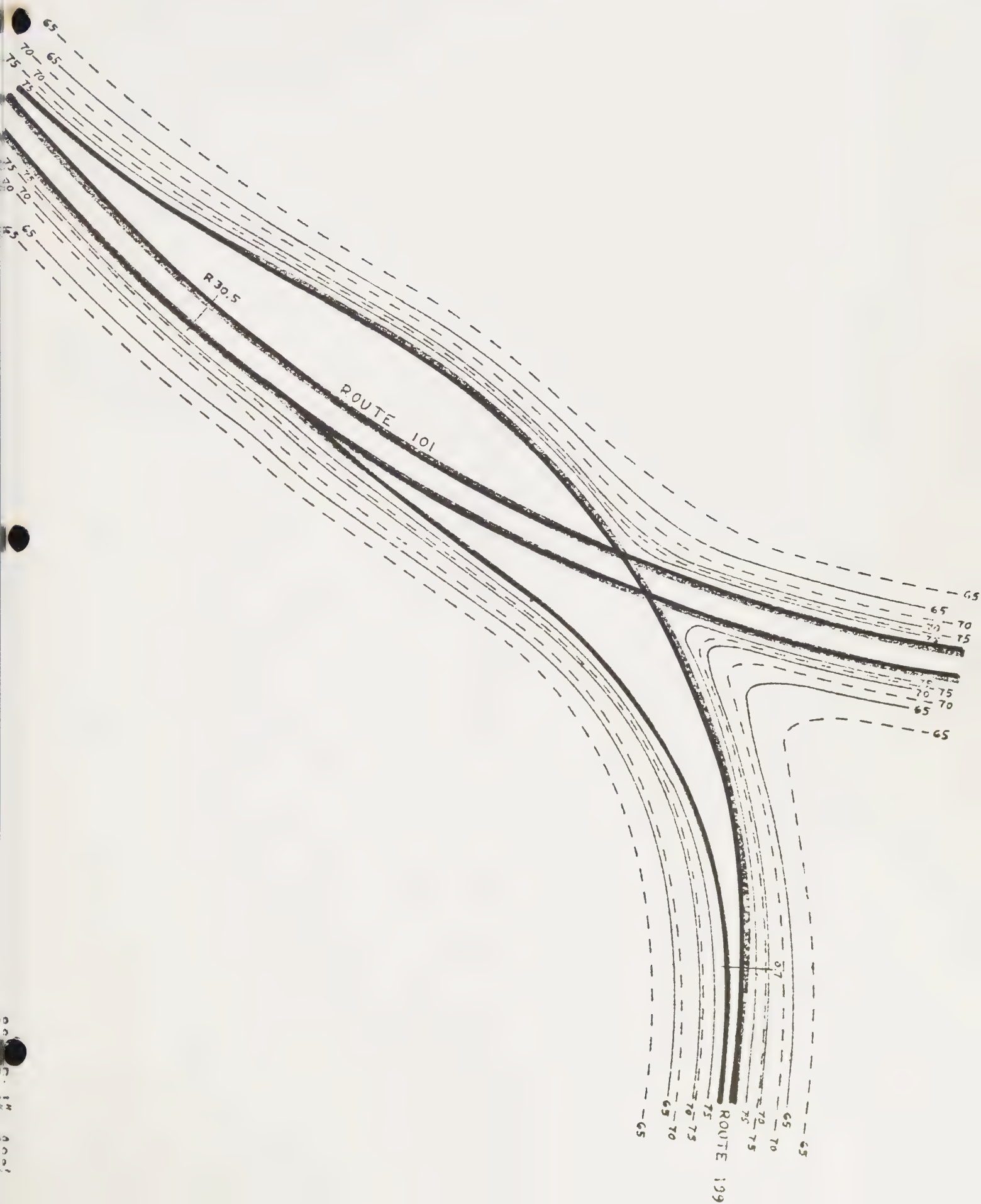
VARIATIONS DUE TO NOISE FROM OTHER SOURCES OR LOCAL TRAFFIC HAVE NOT BEEN CONSIDERED.

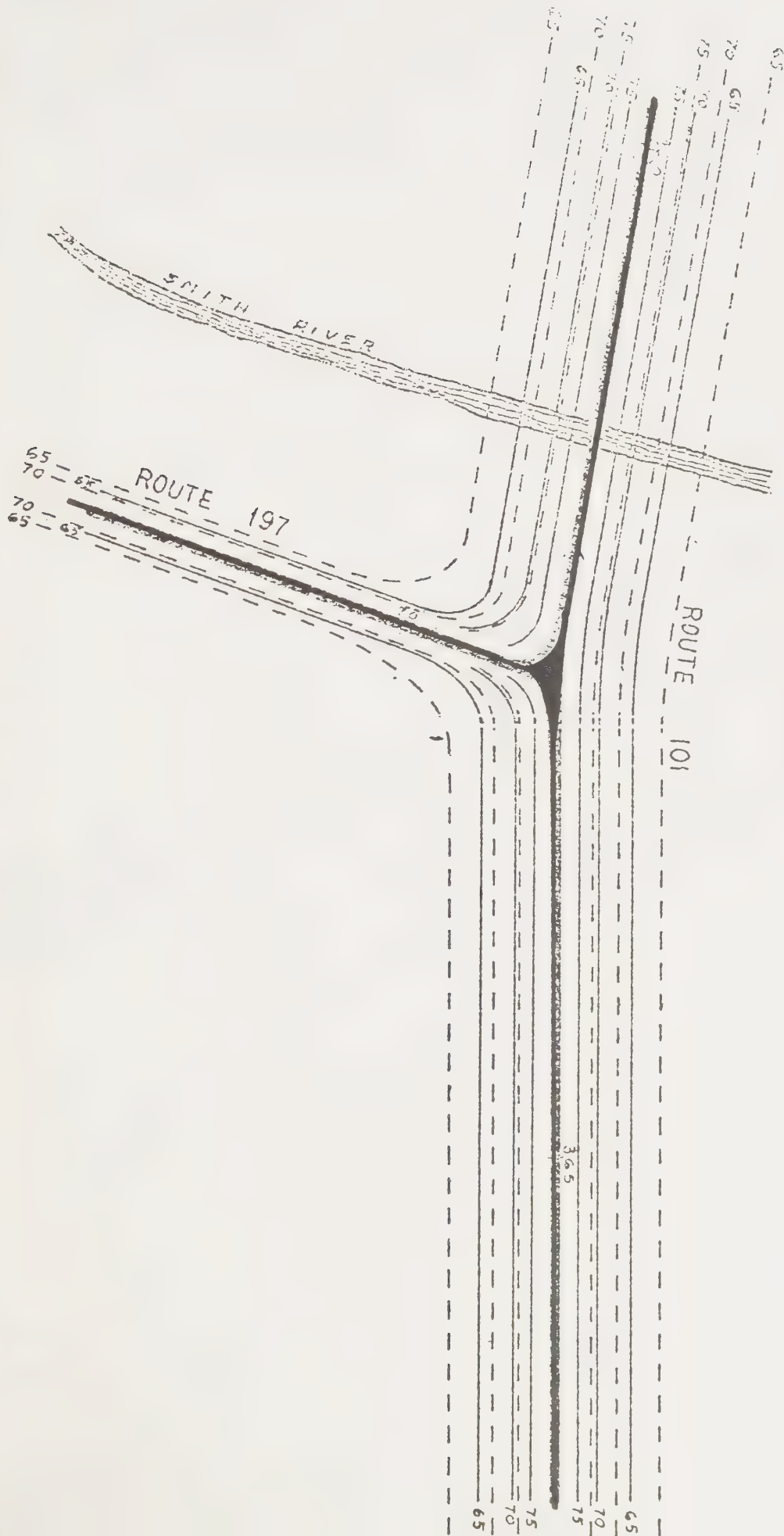
VARIATIONS DUE TO BUILDINGS, BARRIERS, TERRAIN OR VEGETATION HAVE NOT BEEN CONSIDERED.

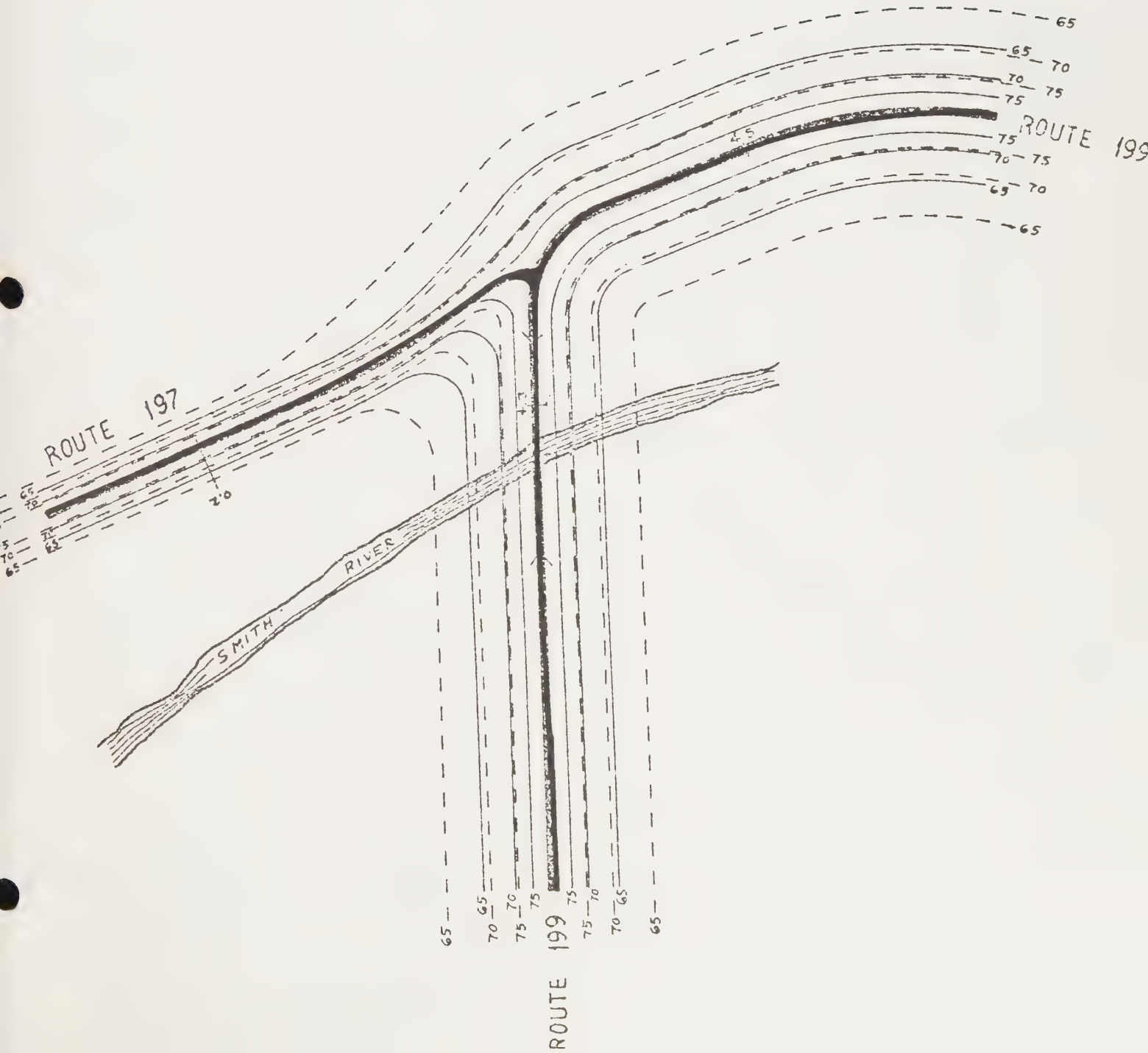
NOISE CONTOURS ARE AT INTERVALS OF 5 DECIBELS (RANGE A) AND ARE SUBJECT TO A RANGE OF ± 3 dBA.







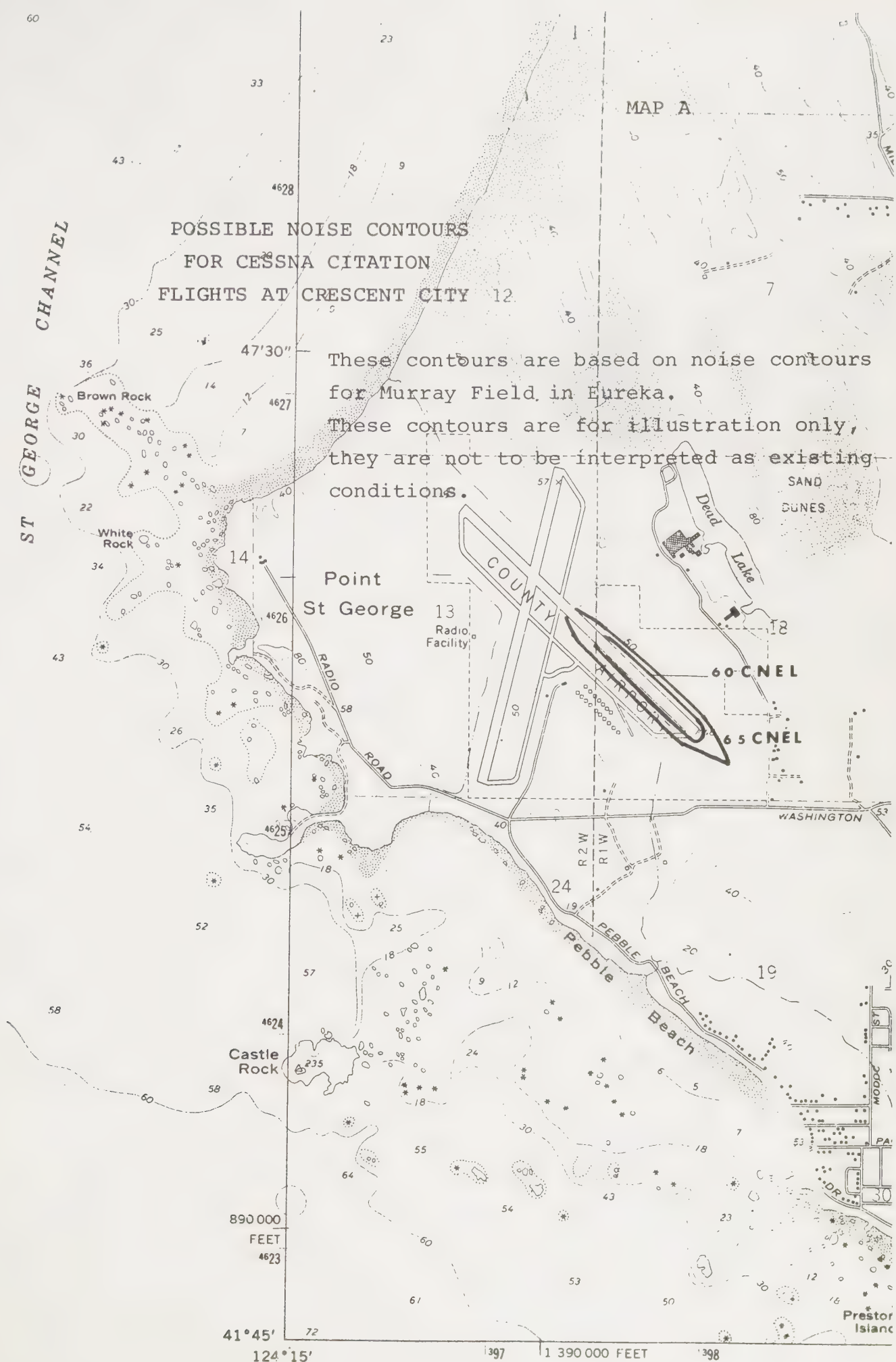




MAP A

POSSIBLE NOISE CONTOURS
FOR CESSNA CITATION
FLIGHTS AT CRESCENT CITY 12

These contours are based on noise contours for Murray Field in Eureka. These contours are for illustration only, they are not to be interpreted as existing conditions.



R2W
R1W

ROAD



Goal of this Element

To prevent incompatible land uses, by reason of excessive noise levels, from occurring in the future and to protect the integrity of Residential, Recreational and Industrial-Commercial uses.

Acceptable Noise Levels

The Federal Department of Housing and Urban Development has developed noise criteria for purposes of HUD constructed or financed housing. These criteria set an acceptable exterior noise level of 65 dB(A) and an acceptable interior noise level of 45 dB(A). Comparing these noise levels with a study conducted by the California Highway Transportation Agency it can be seen that the exterior noise level would fall into the "complaints rare" category.

Methods of Noise Reduction

There are two basic methods of achieving noise reduction; physical methods available to architects, developers and builders and administrative techniques which can be used by local government to require or encourage improved noise compatibility.

Physical Methods

Physical noise reduction techniques can be summarized into the four following groups:

- 1) Acoustical Site Planning - uses the arrangement of building and land to minimize noise impacts. Acoustical site planning techniques include: placing as much distance as possible between the noise source and the noise sensitive area; using buildings as barriers; and orienting noise-sensitive buildings to face away from the noise source.
- 2) Acoustical Architectural Design - incorporates the use of noise reducing techniques in building design. For example, noise can be reduced if the building is limited to one story instead of two.
- 3) Acoustical Construction - incorporates the use of noise reducing techniques and materials in building construction.
- 4) Noise Barriers and Deflectors - these erected between noise sources and noise sensitive areas can reduce the noise impact. Barriers and deflectors include berms made of sloping mounds of earth, walls, fences, thick and dense planting of trees, elevating or lowering noise source and a combination of these techniques.

Examples of the above are illustrated on Figure #2. More complete examples are available upon request from the Planning Department.

Tolerance Levels

	dB(A)
4 times as loud	90-----Local committee activity with influential or legal action
2 times as loud	80-----Petition of protest -----Complaints likely -----Complaints possible
Reference	70-----
1/2 as loud	60----- -----acceptance
1/4 as loud	50-----

Using the above table as a guide and noise level standards recommended by various federal and state agencies, the following table lists minimum criteria for exterior noise levels in their priority to sensitivity.

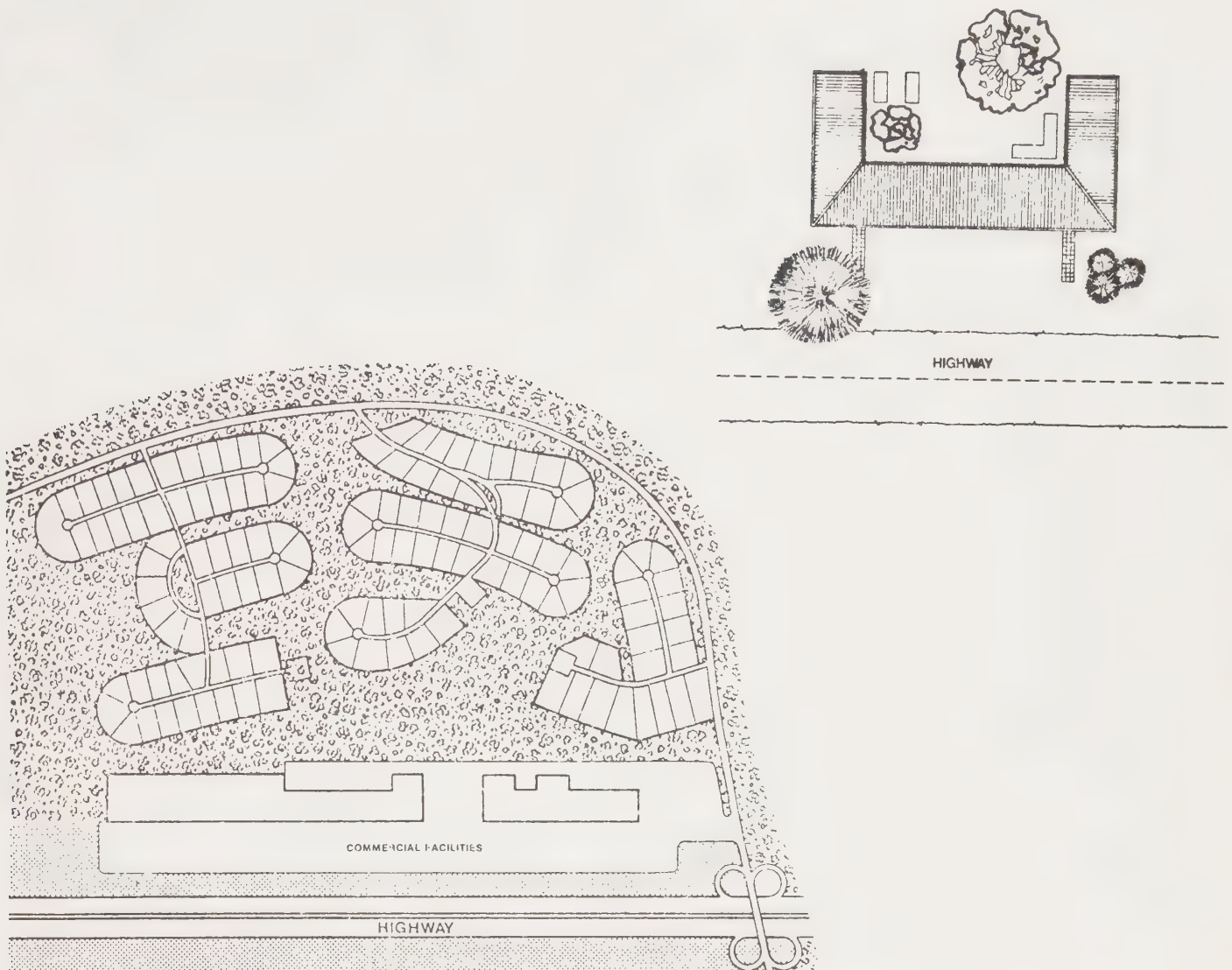
Priority	Use	Maximum Acceptable Exterior Noise Levels
1	Schools, hospitals, convalescent and other types of long-term medical homes	55 dB(A)
2	Residential and Recreational uses	65 dB(A)

(The above are levels of incoming noise, the following are levels of noise radiated.)

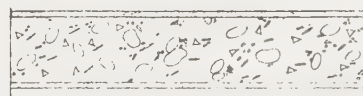
3	Commercial uses	65 dB(A)
4	Industrial and heavy Commercial uses	70 dB(A)

(These noise levels are to be determined by the L10 and CNEL noise level monitoring method.)

Figure 2



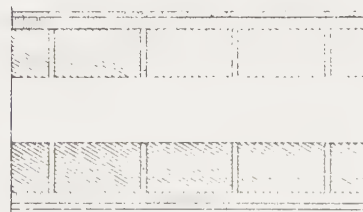
Common Stud Wall
STC = 35
cost = .87/ft²



7" Concrete Wall
STC = 52
cost = 1.97/ft²



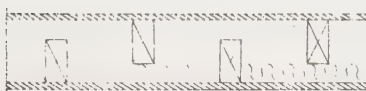
Staggered Stud Wall
STC = 39
cost = 1.12/ft²



Double Brick Wall
STC = 53
cost = 2.80/ft²



4" Brick Wall
STC = 40
cost = 2.00/ft²



**Staggered Stud Wall
with Absorbent Blanket**
STC = 43
cost = 1.25/ft²



9" Brick Wall
STC = 52
cost = 2.52/ft²



12" Brick Wall
STC = 54
cost = 4.25/ft²

STC = Total decibels reduced by material

Administrative Techniques

The administrative techniques available to local government are, but not limited to, the following:

- 1) Zoning - can be used for local control of new development. The principal uses of zoning for noise compatability are: exclusion of typically incompatible uses, such as residences, from a noise-impacted area by allowing only industrial or agricultural uses; regulation of specific details of development design or construction; and use of special development concepts such as cluster or planned unit development.
- 2) Building and Health Codes - can be used to specify construction detail and noise levels which are to be met before occupancy is permitted.
- 3) Environmental Analysis - could address noise impact of project.
- 4) Public Ownership of Land - outright purchase of noise buffer areas.
- 5) Tax Incentives - reduce taxes to offset private cost of noise reduction to meet county standards.
- 6) Noise Ordinance - an ordinance would set criteria and guidelines for noise level control.

Policy

1. The County should develop performance standards (acceptable noise levels) for residential, public, industrial, commercial and recreational uses.
2. Noise standards should be considered in any future development and consideration for the impact of such development upon the immediate area should be a factor in local government evaluation.
3. Existing activities within a commonly zoned area should not be allowed to increase the noise level over 5 dB(A) above the ambient noise level.
4. The County, in recognizing that noise data for the countywide area is limited, should develop a more adequate data base as resources become available.
5. The County should co-operate with the City of Crescent City and other agencies active in Del Norte County in noise abatement measures.

6. The County should develop a comprehensive noise ordinance based on quantitative measures of acceptable noise levels.

Implementation

In order to protect County residents from increasing noise levels, the County should develop an enforceable and workable noise ordinance based upon measureable criteria. The ordinance will set acceptable noise levels for various land uses of the County and should take into consideration the level, nature and duration of the noise and the time of day the noise occurs.

The ordinance should set acceptable noise levels for the exteriors of residential and health care buildings and at the property line of industrial and commercial uses. Public buildings should meet or exceed acceptable noise levels set for their use. This ordinance would incorporate noise level standards in such a way as to create performance standards for industrial users. The performance standards approach allows industry the flexibility to choose between location of the industrial building and cost of control measures. Commercial uses should be separated into commercial and neighborhood commercial categories. Neighborhood commercial uses should have the same guidelines as the surrounding area use (residential).

Land use decisions should consider the compatibility of land use in regards to the noise level generated and the noise level acceptable by adjoining uses of land. No proposed use of land should be allowed which would eventually infringe upon the use of the adjoining land, (unless the proposed use is contractually bound to acceptable performance standards).

Exsisting incompatible land uses that do not meet guidelines established in this Noise Element should be mitigated where possible, practical and necessary.

Enforcement

The ordinance should be adopted by the County when the County has been able to develop a program of quantitative noise monitoring, including the purchase or access to noise monitoring equipment, which has the capability to make the necessary readings, and the personnel trained to operate it.

All land divisions, zone changes, use permits, and Environmental Impact Reports should review the impact of noise exposure or generation and a decision should be rendered upon the expected increase of ambient noise level, if any. A decision should be rendered as to the need for technical investigation (if any) and the party responsible to supply the information.

Techniques for measuring noise levels should be established after purchase of equipment capable of taking and storing readings over a period of time. The ordinance adopted by the County should consider the capabilities of personnel and equipment and should specify procedures for taking noise readings.

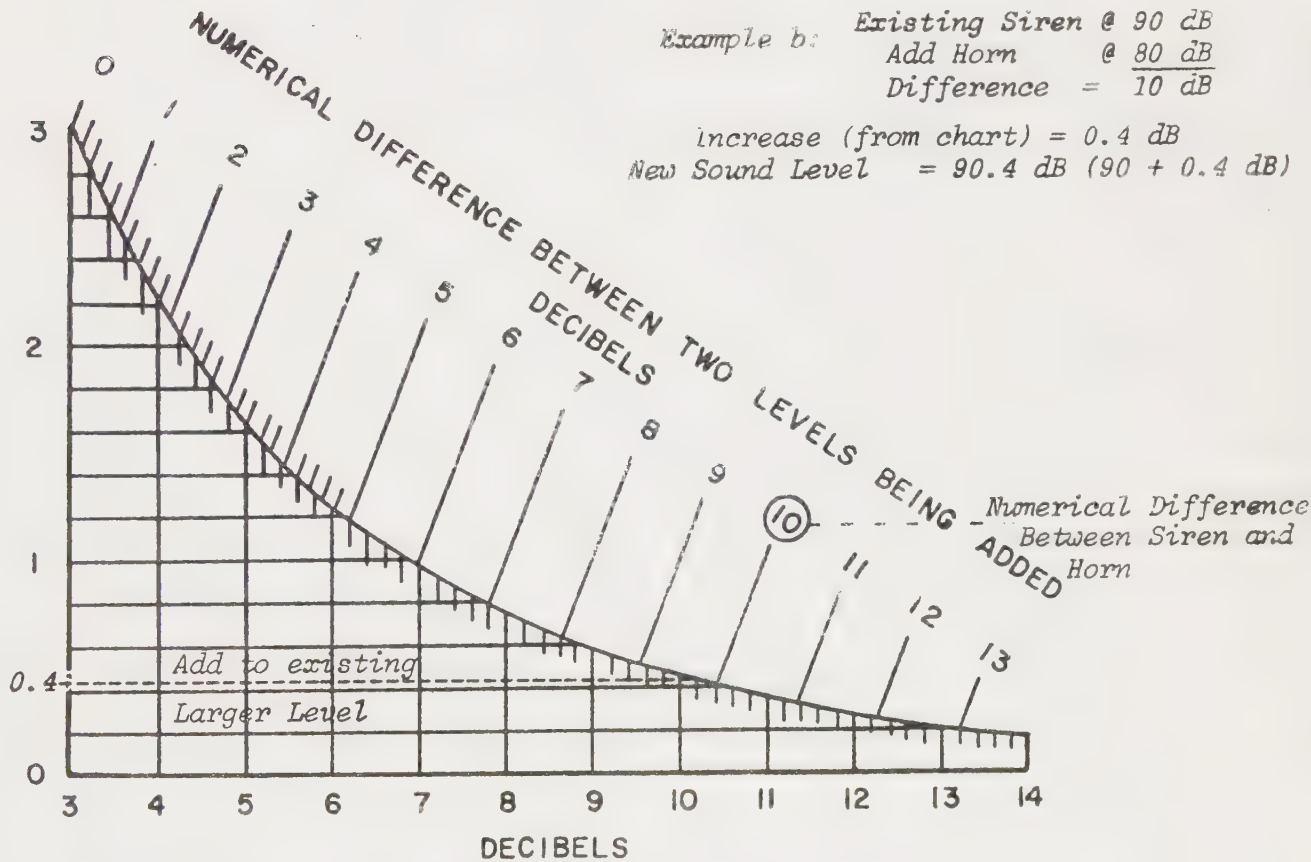
A P P E N D I X

CHART FOR COMBINING LEVELS
OF
UNCORRELATED NOISE SIGNALS

Example b: Existing Siren @ 90 dB
Add Horn @ 80 dB
Difference = 10 dB

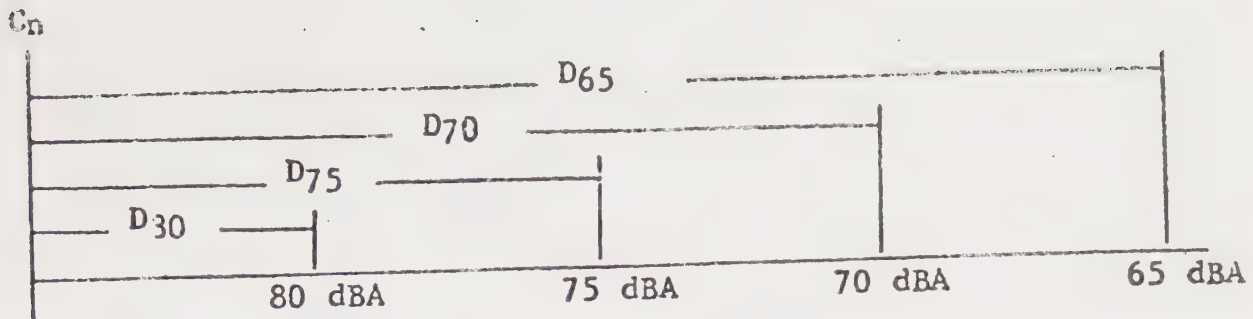
Increase (from chart) = 0.4 dB
New Sound Level = 90.4 dB (90 + 0.4 dB)

NUMERICAL DIFFERENCE BETWEEN TOTAL
AND LARGER LEVEL
DECIBELS



NUMERICAL DIFFERENCE BETWEEN TOTAL AND SMALLER LEVEL*

TYPICAL SECTION



C_n : Center of near lane of traffic

D30 etc: Distance from C_n to noise contour indicated by subscript.

L10 HIGHWAY NOISE LEVELS

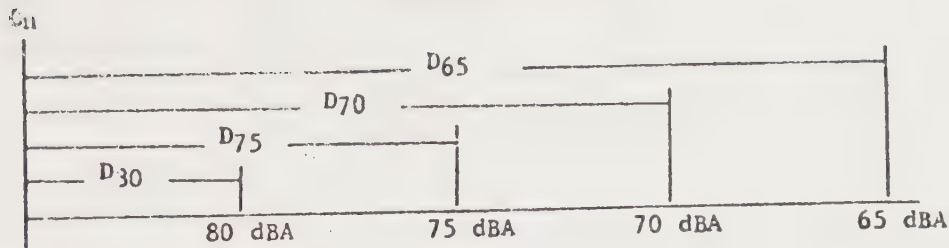
☒ Existing (1974)

☐ Future (1995)

County DEL Norte
Route 101
Sheet 1 of 2

POST MILE	D80	D75	D70	D65	REMARKS
R0.00 to R3.56	—	45	93	181	HUMBOLDT COUNTY LINE to SOUTH BANK RD. INT.
R3.56 to R4.64	26	49	97	181	SOUTH BANK RD. INT. to KLAMATH, JCT. RTE. 169
R4.64 to T5.77	27	54	105	197	KLAMATH, JCT. RTE. 169 to T5.77
T5.77 to 8.18	32	68	128	226	T5.77 to REQUA ROAD
8.18 to 8.84	35	72	134	233	REQUA ROAD to HUNTER CREEK RD.
8.84 to 10.87	36	74	137	238	HUNTER CREEK RD. to TREES OF MYSTERY
10.87 AHEAD	34	70	132	233	TREES OF MYSTERY AHEAD
23.69 BACK	36	73	136	238	HUMBOLDT ROAD BACK
23.69 to 24.36	28	60	118	214	HUMBOLDT ROAD to SANDMINE ROAD
24.36 AHEAD	33	69	131	230	SANDMINE ROAD AHEAD
25.84 BACK	42	86	156	279	ELK VALLEY ROAD (CRESCENT CITY) BACK
25.84 to 26.18	55	104	188	342	ELK VALLEY ROAD to 26.18
26.18 AHEAD	57	106	193	351	
26.38 BACK	41	84	154	262	4 TH ST. BACK (BEGIN SEPARATE ROADWAYS)
26.38 to 26.66	45	90	163	290	4 TH ST. to 9 TH ST.
26.66 AHEAD	47	92	165	296	9 TH ST. AHEAD
26.81 to 27.07	58	109	205	377	26.81 to NORTHCREST DRIVE
27.07 to R27.56	—	51	105	210	NORTHCREST DRIVE to McNAMARA RD.
R27.56 to R27.87	—	38	88	191	McNAMARA RD. to WASHINGTON BOULEVARD INT.
R27.87 to R30.81	—	29	67	144	WASHINGTON BOULEVARD INT. to JCT. RTE. 199
R30.81 to 31.19	—	—	52	114	JCT. RTE. 199 to ELK VALLEY CROSS RD.
31.19 AHEAD	—	47	93	175	ELK VALLEY CROSS RD. AHEAD

TYPICAL SECTION



C_n : Center of near lane of traffic

D30 etc: Distance from C_n to noise contour indicated by subscript.

L10 HIGHWAY NOISE LEVELS

- ☒ Existing (1974)
☐ Future (1995)

County DELAWARE
Route 101
Sheet 1 of 2

POST MILE	D80	D75	D70	D65	REMARKS
R 0.00 TO R 3.56	—	45	93	181	HUMBOLDT COUNTY LINE TO SOUTH BANK RD INT
R 3.56 TO R 4.64	26	49	97	181	SOUTH BANK RD. INT TO KLAMATH, JCT. RTE. 169
R 4.64 TO T 5.77	27	54	105	197	KLAMATH, JCT. RTE 169 TO T 5.77
T 5.77 TO 8.18	32	68	128	226	T 5.77 TO REGUA ROAD
8.18 TO 8.84	35	72	134	233	REGUA ROAD TO HUNTER CREEK RD.
8.84 TO 10.87	36	74	137	238	HUNTER CREEK RD. TO TREES OF MYSTERY
10.87 AHEAD	34	70	132	233	TREES OF MYSTERY AHEAD
23.69 BACK	36	73	136	238	HUMBOLDT ROAD BACK
23.69 TO 24.36	28	60	118	214	HUMBOLDT ROAD TO SANDHINE ROAD
24.36 AHEAD	33	67	131	230	SANDHINE ROAD AHEAD
25.84 BACK	42	86	156	279	ELK VALLEY ROAD (CRESCENT CITY) BACK
25.84 TO 26.18	55	104	188	342	ELK VALLEY ROAD TO 26.18
26.18 AHEAD	57	106	193	351	
26.38 BACK	41	84	154	262	4TH ST. BACK (BEGIN SEPARATE ROADWAYS)
26.38 TO 26.66	45	90	163	290	4TH ST. TO 9TH ST.
26.66 AHEAD	47	92	165	296	9TH ST AHEAD
26.81 TO 27.07	58	109	205	377	26.81 TO NORTHCREST DRIVE
27.07 TO R 27.56	—	51	105	210	NORTHCREST DRIVE TO McNAMARA RD
R 27.56 TO R 27.87	—	38	83	191	McNAMARA RD TO WASHINGTON BOULEVARD INT.
R 27.87 TO R 30.51	—	29	67	144	WASHINGTON BOULEVARD INT. TO JCT. RTE 199
R 30.81 TO 31.19	—	—	52	114	JCT. RTE. 199 TO ELK VALLEY CROSS RD.
31.19 AHEAD	—	47	93	175	ELK VALLEY CROSS RD AHEAD

POST MILE	D80	D75	D70	D65	REMARKS
36.26 BACK	26	51	101	189	JCT. RTE. 197 BACK
36.26 TO 39.83	26	51	100	189	JCT. RTE. 197 TO FRED HAIGHT DRIVE
39.83 AHEAD	-	45	87	164	FRED HAIGHT DRIVE AHEAD
41.00	27	54	105	196	
46.49 BACK	26	52	101	189	OREGON STATE LINE BACK

L10 HIGHWAY NOISE LEVELS

☒ Existing (1974)

☐ Future (1995)

County DEL NORTE

Route 169

POST MILE	D80	D75	D70	D65	REMARKS
R 0.00 TO 0.54	-	29	61	122	KLAMATH, JCT. RTE. 101 TO SIMPSON MILL RD.
0.54 TO 2.77	-	-	37	75	SIMPSON MILL RD. TO RED MOUNTAIN RD.
2.77 TO 3.52	-	-	-	52	RED MOUNTAIN RD. TO KLAMATH GLEN
3.52 TO 8.52	-	-	-	-	UNCONSTRUCTED

L10 HIGHWAY NOISE LEVELS

☒ Existing (1974)

☐ Future (1995)

County DEL NORTE

Route 197

POST MILE	D80	D75	D70	D65	REMARKS
R 0.00 TO 2.64	-	-	32	64	JCT. RTE. 199 TO 2.64
2.64 TO 7.08	-	-	-	45	2.64 TO JCT. RTE. 101

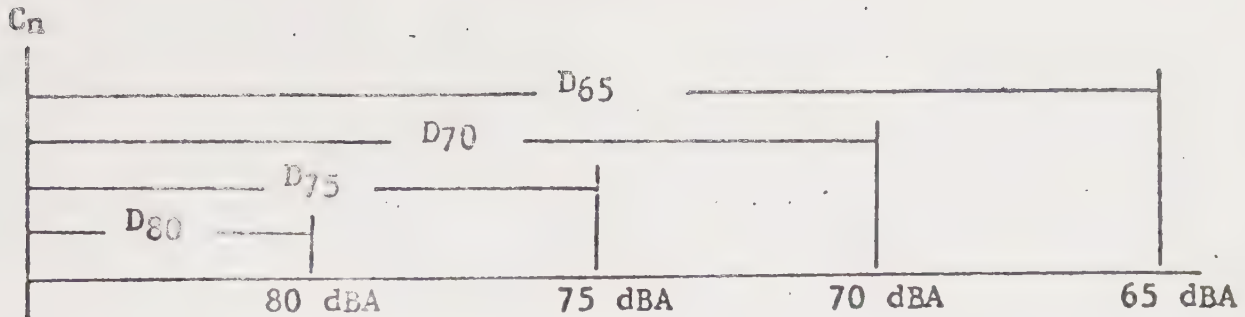
L10 HIGHWAY NOISE LEVELS

☒ Existing (1974)
☐ Future (1995)

County DEL NORTE
Route 199

POST MILE	D80	D75	D70	D65	REMARKS
T 3.70	-	46	94	179	END INDEPENDENT ALIGNMENTS
4.37 BACK	-	45	93	177	JCT. RTE. 197 BACK
4.37 AHEAD	-	47	96	182	JCT. RTE. 197 AHEAD
5.90 BACK	-	43	90	173	HILOUCHI VILLAGE, EAST BACK
5.90 AHEAD	-	43	89	172	HILOUCHI VILLAGE, EAST AHEAD
7.14 BACK	-	43	88	170	
7.14 AHEAD	-	43	86	166	
13.00 BACK	-	41	81	157	
13.00 TO 13.83	-	34	71	142	
13.83 TO T 14.59	-	31	66	136	13.83 TO GASQUET
T 14.59 TO R 16.91	-	35	71	139	GASQUET TO R 16.91
R 16.91 AHEAD	-	41	77	145	
19.99 BACK	-	40	76	143	
19.99 AHEAD	-	38	78	154	
20.96 BACK	-	38	78	153	
20.96 AHEAD	-	39	79	153	
21.28 BACK	-	39	78	153	
21.28 AHEAD	-	39	80	157	
25.73 BACK	-	38	78	153	
25.73 AHEAD	-	39	82	160	
26.62 BACK	-	39	81	159	
26.62 AHEAD	-	38	79	154	
26.86 BACK	-	38	78	154	
26.86 AHEAD	-	36	76	151	
28.09 BACK	-	36	75	150	
28.09 AHEAD	-	35	72	143	
31.59 BACK	-	34	70	140	
31.59 AHEAD	-	37	70	130	
33.52 TO 33.87	-	-	-	-	RANDOLPH COLLIER TUNNEL
36.41 BACK	-	36	68	127	OREGON STATE LINE BACK

TYPICAL SECTION



C_n : Center of near lane of traffic

D80 etc: Distance from C_n to noise contour indicated by subscript.

L10 HIGHWAY NOISE LEVELS

- ☐ Existing (1974)
☒ Future (1995)

County DEL NORTE
 Route 101
 Sheet 1 of 2

POST MILE	D80	D75	D70	D65	REMARKS
R 0.00 TO R 3.56	34	74	144	268	HUMBOLDT COUNTY LINE TO SOUTH BANK RD. INT.
R 3.56 TO R 4.64	42	84	151	261	SOUTH BANK RD. INT. TO KLAMATH, JCT. RTE. 169
R 4.64 TO T 5.77	41	82	148	257	KLAMATH, JCT. RTE. 169 TO T 5.77
T 5.77 TO 8.18	32	71	138	250	T 5.77 TO REGUA RD.
8.18 TO 8.84	38	81	152	273	REGUA RD. TO HUNTER CREEK RD.
8.84 TO 10.87	48	96	172	310	HUNTER CREEK ROAD TO TREES OF MYSTERY
23.69 BACK	72	124	212	374	HUMBOLDT RD. BACK
23.69 TO 24.36	53	100	167	286	HUMBOLDT RD. TO SANDMINE RD.
24.36 AHEAD	46	90	156	267	SANDMINE RD. AHEAD
25.84 BACK	62	115	213	389	ELK VALLEY RD. (CRESCENT CITY) BACK
25.84 TO 26.18	81	154	291	553	ELK VALLEY RD. TO 26.18.
26.18 AHEAD	83	159	300	574	
26.38 BACK	74	131	232	435	4 TH ST. BACK (BEGIN SEPARATE ROADWAYS)
26.33 TO 26.66	78	135	248	476	4 TH ST. TO 9 TH ST.
26.66 AHEAD	81	141	263	500	9 TH ST. AHEAD
26.81 TO 27.07	87	170	329	645	26.81 TO NORTHCREST DRIVE
27.07 TO R 27.56	35	78	161	313	NORTHCREST DRIVE TO MCNAMARA RD.
R 27.56 TO R 27.87	-	63	142	291	MCNAMARA RD. TO WASHINGTON BOULEVARD INT.
R 27.87 TO R 30.81	-	36	86	188	WASHINGTON BOULEVARD INT. TO JCT. RTE. 199
R 30.81 TO 31.19	-	33	80	177	JCT. RTE. 199 TO ELK VALLEY CROSS RD
36.26 BACK	49	94	163	281	JCT. RTE. 197 BACK
36.26 TO 39.83	45	88	155	267	JCT. RTE. 197 TO FRED HAIGHT DRIVE

POST MILE	D80	D75	D70	D65	REMARKS
39.83 AHEAD	41	82	148	256	FRED HAIGHT DRIVE AHEAD
41.00	49	95	163	282	
46.49 BACK	38	78	142	247	OREGON STATE LINE BACK

L10 HIGHWAY NOISE LEVELS

☐ Existing (1974)

County DEL NORTE

☒ Future (1995)

Route 169

POST MILE	D80	D75	D70	D65	REMARKS
0.00 TO 0.54	—	52	105	195	KLAMATH, JCT. RTE. 101 TO SIMPSON MILL RD.
0.54 TO 2.77	—	30	63	128	SIMPSON MILL RD. TO RED MOUNTAIN RD.
2.77 TO 3.52	—	—	44	89	RED MOUNTAIN RD. TO KLAMATH GLEN
3.52 TO 8.52	—	—	—	—	UNCONSTRUCTED

L10 HIGHWAY NOISE LEVELS

☐ Existing (1974)

County DEL NORTE

☒ Future (1995)

Route 197

POST MILE	D80	D75	D70	D65	REMARKS
0.00 TO 2.64	—	26	52	89	JCT. RTE. 199 TO 2.64
2.64 TO 7.08	—	—	37	70	2.64 TO JCT. RTE. 101

L10 HIGHWAY NOISE LEVELS

☐ Existing (1974)

☒ Future (1995)

County DEL NORTE

Route 199

POST MILE	D80	D75	D70	D65	REMARKS
T 6.78	37	76	139	240	END INDEPENDENT ALIGNMENTS
4.37 BACK	49	93	160	274	JCT. RTE. 197 BACK
4.37 AHEAD	52	98	165	282	JCT. RTE. 197 AHEAD
5.90 BACK	40	81	145	248	HIOUCHI VILLAGE, EAST BACK
5.90 AHEAD	38	78	142	243	HIOUCHI VILLAGE, EAST AHEAD
7.14 BACK	39	79	143	245	
7.14 AHEAD	33	69	131	232	
13.00 BACK	35	72	135	238	
13.00 TO 13.83	-	53	111	213	
13.83 TO T 14.59	-	51	108	211	13.83 TO GASQUET
T 14.59 TO R 16.91	-	52	108	209	GASQUET TO R 16.91
R 16.91 AHEAD	31	66	126	227	
19.99 BACK	30	63	122	221	
19.99 AHEAD	33	69	131	231	
20.96 BACK	32	69	130	229	
20.96 TO 21.28	35	73	136	237	
21.28 AHEAD	41	82	147	251	
25.73 BACK	38	78	141	243	
25.73 AHEAD	32	69	130	229	WITH PROTECT (WIDEENING)
26.62 BACK	32	68	129	228	
26.62 TO 26.86	31	65	125	224	
26.86 AHEAD	30	65	124	222	
28.09 BACK	30	64	123	220	WITH WIDEENING
28.09 AHEAD	-	45	93	183	4 LANE SECTION
29.20 BACK	-	44	92	181	
29.20 AHEAD	26	54	107	200	
31.59	-	52	103	194	
33.52 TO 33.87	-	-	-	-	RANDOLPH COLLIER TUNNEL
36.41 BACK	-	48	97	184	OREGON STATE LINE BACK

CONSERVATION AND OPEN SPACE



Introduction

In response for a concern for the environment, the California State Legislature passed legislation in 1971 requiring, for inclusion as part of the General Plan, a Conservation Element and Open Space Element.

The Conservation Element is required to consider the identification, conservation, and utilization of our natural resources, including water, forests, rivers, soils, fisheries, wildlife, minerals and other natural resources. The Open Space Element is required to identify and plan for the utilization and preservation of natural resources. Open space uses are defined as: the preservation of natural resources, for the managed production of resources, for outdoor recreation, and for public health and safety. The two elements primarily deal with resources. For this reason, the two have been combined into one element.

The conservation of natural resources and the protection of open space are of county-wide importance, however Del Norte County is 2/3 directly controlled by State and/or Federal agencies. This public ownership, primarily in the eastern mountainous area of the county, provides open space, recreation, view areas and continued resource production opportunities for the respective State and/or Federal agencies and consequently for the citizens of Del Norte County. The remaining 1/3 is the focus of Del Norte County. This area provides the county with the majority of its business activity, residences, agricultural and private timber production, recreation and contributes substantially to its tourist industry. Therefore, the focus of this element will be on the Smith River Coastal Plain, and the lower extent of the Smith and Klamath Rivers.

Assumptions

Population forecasts for the State and the Nation have projected increasing population figures and resultant urban pressures upon the environment. Population forecasts for Del Norte County have varied with each agency, however all projections indicate moderate population increase for Del Norte. The following assumptions are based upon conservative population increases for the county, the attractiveness of the quality of the physical environment of the county, and the indication that one of the county's major assets is its physical environment.

1. Population and economic activity will increase in the State and the Nation while at a somewhat smaller scale in the County.
2. Future population growth with increased demands will result in increased pressures for utilization of natural resources and land.
3. There is a limited amount of natural resources.

4. **The state** will increasingly regulate natural resources.
5. Timber production and timber dependent industries, agriculture and agriculturally dependent industries, and general resource production will continue to be major contributors to the economy of the County.
6. Tourism will increase in importance as an element of the local economy.
7. The physical setting is an important element in the well-being of future generations.
8. Community awareness of environmental values will increase and place increased pressure upon government to respond.
9. Conservation of natural resources is necessary and valuable.

Goals

1. Preserve and manage the entire range of community and environmental resources for the health, safety and welfare of the community.
2. Encourage development in a safe and efficient manner, while optimizing the utilization and protection of our environmental resources.
3. Develop a far-sighted plan with practical and obtainable programs of action.

Purpose and Need

In the history of our Nation, it has been the accepted pattern that the country was large and people were few. At that time we could and did make serious blunders in our treatment of the land without too serious consequences. If a forest was destroyed or a rangeland overgrazed and turned to desert, there were more forests and rangeland still undamaged. Now, due to rapid urbanization and increased demand for resources, serious blunders can be irrevocable. We have lost most of our margin for error.

At stake in the debate of conservation of the land are those things that add to a rich and full life for individuals. Not only is it important to insure food and shelter and our mechanized way of life for future population, it is also important to provide those qualities that enrich life: space to move in, wild lands to roam, undisturbed scenery to view and wild animals to watch, study or hunt.

In Del Norte County this means maintaining the quality of the environment so that there is no deterioration of the air, water quality, recreational or scenic values of the county. By conserving its natural resources the county can provide for the aesthetic enjoyment of future populations, increase the safety and enjoyment of living in the county and benefit the economic security of the county.

Climate

Del Norte County can be characterized as having moderate temperatures, considerable precipitation and frequent foggy days throughout the year. Temperature variations along the coast are moderate, usually as little as 10°F from summer to winter. However, variations inland can be significant.

Temperatures below freezing are experienced nearly every winter throughout the area and colder temperatures are common in the eastern mountains. Maximum readings seldom exceed 80° along the coast while 100°+ readings are common in the mountain valleys (see figures 1A and 1B). Fog and low clouds near the coast limit sunny days, with inland areas relatively unaffected by the fog.

Rainfall is light to non-existent in the summer months and quite heavy in the winter, increasing with intensity as elevation inland increases. Snowfall is light and infrequent near the coast but ranges from 50 to approximately 150 inches in the higher mountain elevations. About 75% of the county's precipitation occurs during five months of the year, November through March, and about 90% occurs from October through April (see figure 1C and map 1).

Del Norte generally has a moderate climate with 254 frost-free days annually and an average annual temperature in the low 50°. Overall, the Pacific Ocean, which is only 35 air miles from the most inland point of the county, has a great moderating effect on the climate.

Prevailing winter winds come from the southeast generally indicating storms from the Pacific Northwest. Winter winds can be strong, sometimes more than 50 mph. Clear winter days and prevailing summer winds blow from the northwest. While not as strong as some winter storm winds, their mean velocity is greater. Wind data at the Crescent City Airport from June to December indicates that wind velocities in excess of 16 mph occur quite frequently out of the northwest, especially from June to October (frequent wind velocities in excess of 16 mph have been and continue to be important in determining the northwesterly orientation of the dune system from Point St. George to the Smith River.)

Informational Recommendation

Weather conditions are most permissible for outdoor recreation from June through September. Summer winds blow normally from a northwesterly direction. The summer sun arcs across the sky slightly to the south. Trees and shrubs placed on the north side of an area will act as buffers to the northwesterly wind. Sun warmth and light are increased. Enjoyment of outdoor recreation can therefore be increased by a simple conservation measure.

Figure 1A

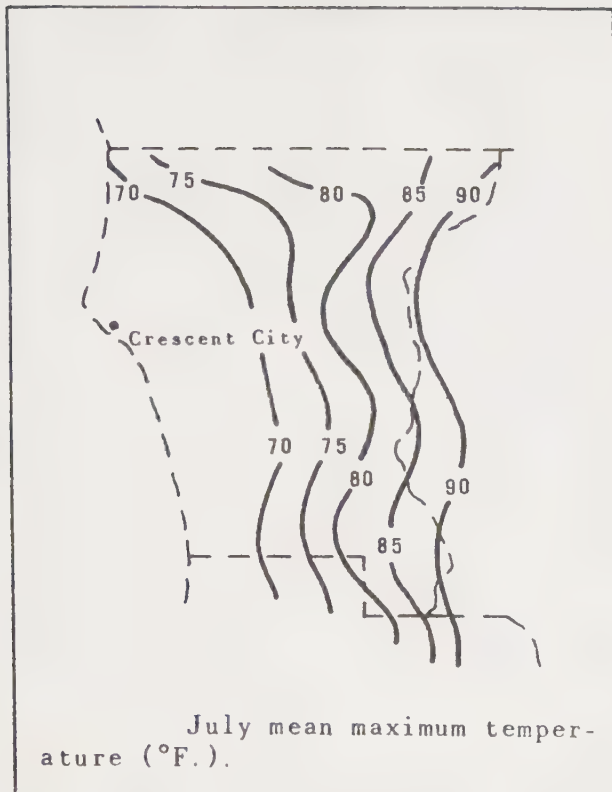


Figure 1B

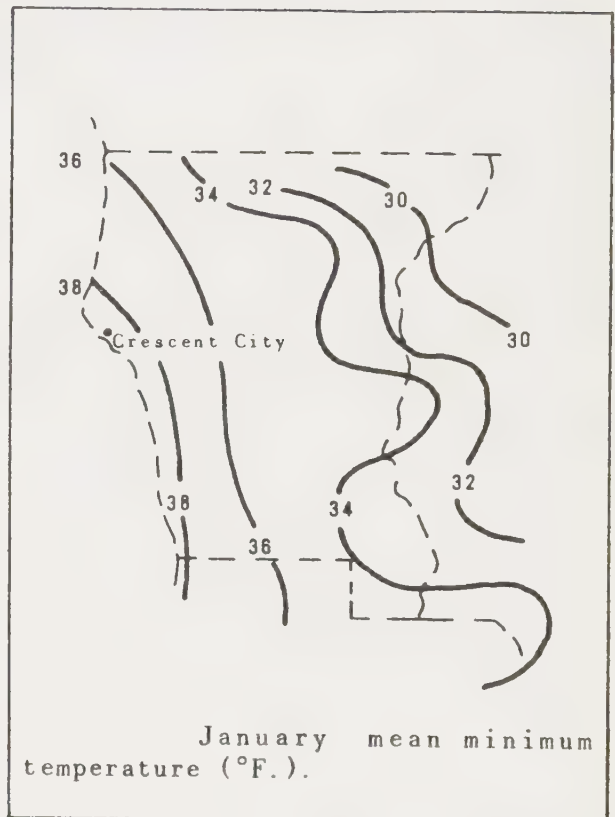
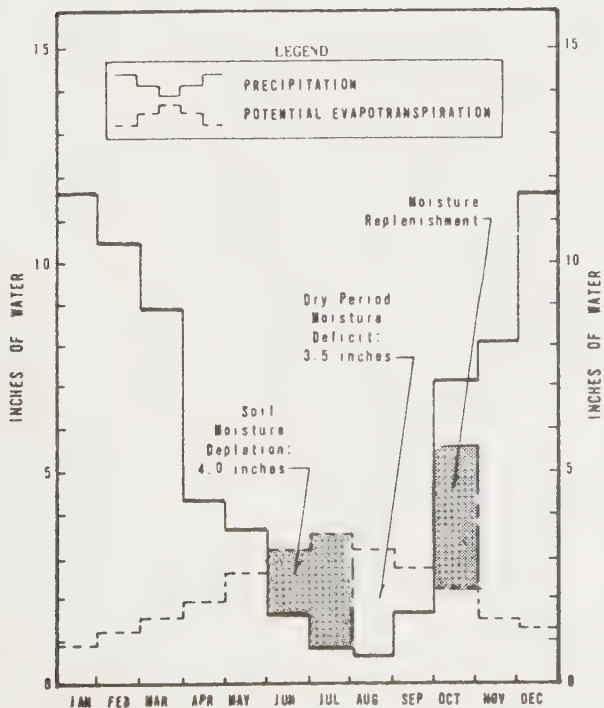
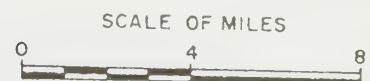


Figure 1C





LINES OF MEAN
SEASONAL PRECIPITATION
BASED ON THE PERIOD OF RECORD
1905-06 THROUGH 1954-55



Soils

Soils of Del Norte County can be generalized into two types: 1) Coastal soils and 2) upland or mountainous soils. The coastal soils are primarily important to agricultural production and suitability for residences while the upland soils are important as forest production, wildlife and watershed.

Coastal Soils

Soils suitable for agricultural development are generally restricted to the Smith River Plain and the Klamath River area. These soils were formed largely from alluvial deposits but vary due to differences in age. The major soil bodies in these two areas belong to either alluvial or terrace groupings. The terrace soils are relatively fine texture, acid reacting and under existing conditions of high rainfall, have moderately good internal drainage.

The more recent alluvial soils are found in the lower flood plains immediately adjacent to the Smith and Klamath Rivers and are generally rather coarse textured, well drained and readily suitable to irrigation.

Specific soils and their characteristics are located in Table I.

The agricultural rating of Soils according to the Storie Index Method considers four general factors:

- A - Character of soil profile and soil depth.
- B - Texture of surface soil.
- C - Slope.
- X - Other factors such as drainage, alkalinity, and erosion.

Each factor is based on an evaluation of 100 percent indicating the most favorable condition for plant growth. The index rating for a soil is obtained by evaluating the four above factors.

<u>INDEX RATING</u> <u>IN PERCENT</u>	<u>SOIL GRADE</u>	<u>DESCRIPTION</u>
80 - 100	I	Excellent for extensive agriculture, easily worked, productivity easy to maintain, no special erosion control procedures required.
60 - 80	II	Moderately suited to intensive agriculture.
40 - 60	III	Only fairly well suited

Table I

S O I L S O F C O A S T A L D E L N O R T E C O U N T Y

OREGON BORDER TO SOUTH CRESCENT CITY

KLAMATH RIVER BASIN

SOIL	% OF TOTAL	SOIL TYPE	DRAINAGE	AGRICULTURAL USE	SLOPE	INDEX	GRADE
Arcata	3%	Ar2	good	bulb & pasture	0-3%	80	1
		Ar3	good	bulb & pasture	0-3%	80	1
(bulb & pasture use are dependent upon irrigation & fertilization; nutrient level is overriding factor; permeability is moderately rapid; runoff medium.)							
Dayside	0.5%	Ba2	poor	pasture	0-3%	36	4
		Ba3	poor	pasture	0-3%	36	4
		Ba4	poor	pasture	0-3%	36	4
(poor drainage limits use to almost exclusively non-irrigated forage; overriding factor is drainage condition; permeability is moderagely slow to slow; runoff is slow.)							
Carlotta	9 %	Ca2	moderate	permanent pas- ture & 2nd growth redwood	0-3%	90	1
		Ca3	moderate	permanent pasture & 2nd growth redwood	0-3%	57	3
(poorly drained conditions exist on terrace positions; overriding factor is nutrient level; permeability is moderately rapid, run- off is medium.)							
Ferndale	15%	Fe2	good	permanent pasture and crops	0-3%	100	1
		Fe3	good	permanent pasture and crops	0-3%	100	1
		Fe4	subject to annual flooding	permanent pas- ture & crops	0-3%	70	2
		Fe5	deep per- olation	permanent pas- ture & crops	0-3%	70	2

SOIL	% OF TOTAL	SOIL TYPE	DRAINAGE	AGRICULTURAL USE	SLOPE	INDEX	GRADE
Ferndale		Fe6	frequent annual flooding	pasture	0-3%		variable
(one of the better soils in the County. Application of nitrogen and phosphate increase yields appreciably; overriding factor is channeling; permeability is moderate; runoff is medium.)							
Hookton	1%	Hk2	imperfect	clover & grasses	0-3%	42	3
		Hk3	eroded	clover & grasses	3-8%	28	4
		Hk4	eroded	fescue & clover	8-16%	39	4
(Historically used for hay crops, presently clover & grasses. Crop yields have declined. Soil is easily eroded from slopes plowed prior to a rain. Overriding factor is degree of erosion. Permeability is moderate and runoff medium to rapid.)							
Hutsinpillar	5%	Hp2	poor	permanent pasture	0-3%	27	4
		Hp3	imperfect	permanent pasture & some cultivation	0-3%	36	4
(Some vegetables can be produced if proper drainage is provided and care is taken to avoid compaction. Overriding factor is drainage. Slow runoff and slow to very slow permeability.)							
Loleta	4.5%	Lo2	imperfect	pasture crop	0-3%	68	2
		Lo3	poor	pasture crop	0-3%	47	3
		Lo4	poor	pasture crop	0-3%	52	3
(In type Lo3 hydrophytic weeds are difficult to control. Type Lo4 (Hunter Creek) is overwashed annually. Overriding factor is drainage. Permeability is moderate; runoff is slow.)							
Rowdy	13%	Ry2	good	bulb production permanent pasture	0-3%	95	1
		Ry3	good	bulb production permanent pasture	3-8%	90	1

SOIL	% OF TOTAL	SOIL TYPE	DRAINAGE	AGRICULTURAL USE	SLOPE	INDEX	GRADE
Rowdy		Ry4	good	bulb production permanent pasture	0-3%	81	1
		Ry5	good	bulb production permanent pasture	3-8%	77	2
		Ry6	good	bulb production permanent pasture	0-3%	61	2

(Ry2 is an ideal agricultural soil due to its excellent structure and good drainage. Ry3 & Ry4 are very good agricultural soils. Ry3, Ry5, and Ry6 all require care in plowing to prevent erosion. Overriding factor is nutrient level. Runoff is slow, permeability is moderate to moderately slow.)

Russ	2%	Ru2	well drained	cultivation & pasture crops	0-3%	95	1
		Ru3	moderately well drained	cultivation & pasture crops	0-3%	95	1
		Ru4	moderately well drained	cultivation & pasture crops	0-3%	71	2

(Ru2, when properly managed, is one of the most productive soils in the county. Ru3 & Ru4 are also good productive soils. Overriding factor is drainage. Runoff is medium. Permeability is moderately rapid in the upper portion to moderately slow at depth.)

Talawa	9%	Ta2	question- able	2nd growth redwood	0-3%	58	3
		Ta3	poor	water loving plants	0-3%	38	4

(Ta2 has good internal drainage however runoff is slow and permeability is moderately rapid. Ta3 requires artificial drainage prior to any cultivation. Overriding factor is drainage. Permeability is moderately rapid. Depressed areas on top of the terraces and bottoms of dissections are poorly drained.)

SOIL	% OF TOAL	SOIL TYPE	DRAINAGE	AGRICULTURAL USE	SLOPE	INDEX	GRADE
Timmons	17%	Ti2	well drained	timber & grass	0-15%	58	3
(Overriding factor is nutrient level. Permeability is variable. Runoff is medium. Those areas that have been converted to grass land produce poor quality and yield for pasture.)							
* * * * *							
GP	Gravel Pit						
MA	Man Altered - Miscellaneous areas altered by man.						Variable
PB	Peat Bog	- Small, poorly to very poorly drained areas with high organic content.				19	5
RW	Riverwash	- Areas of annual water inundation, where clearing of natural vegetation has often initiated severe erosion				5	6
SD	Sand dunes	- Stable dunes, not presently moving				5	6
SW	Swamp	- Area inundated for at least 9 months per year				10	6
TE	Terrace Escarpment	- 70% slope between terrace tops and alluvial bottoms.				5	6
UI	Urban & Industrial	-					Variable
WSA	Wet Sand Areas	- Water table is close to the surface. Grazing is the best agricultural potential.				19	5

20 - 40	IV	Poorly suited to crops
10 - 20	V	Very poorly suited, low yield, generally marginal land.
Less than 10	VI	Non-agricultural soils.

(These index and soils grades are shown for each soil type in Table I)

Goals - Soils and Agricultural Land

It is the goal of Del Norte County to:

1. Conserve soil resources to provide a continuing base for agricultural productivity and the County's economy.
2. Reserve in agriculture those soils capable of producing a wide variety of valuable crops.
3. Minimize disruption to viable agricultural areas.

Prime Soils

Prime agricultural soils are a finite and delicate resource. Erosion, compaction and excavation will do irreparable damage to prime soils. These soils have evolved over extended periods of time and once destroyed, or developed for urban uses, they are not feasibly recoverable.

The prime soils of Del Norte County are located on the Smith River alluvial fan, adjacent to the foothills, and in the Klamath River area. Other less potentially productive soils are located adjacent to or surrounded by these better soils.

Agriculture is an important export industry for Del Norte County. Though the relatively small rate of growth in agricultural output has been accomplished without significant increases in absolute employment, agriculture has consistently provided 300 or more jobs per year in direct employment and a small portion of employment in retail sales and services. The consistency of agriculture production has been a reliable source of taxable land and sales for the county.

Of the total value of agricultural production in 1974, 58% consisted of nursery crops, 15% livestock and poultry, 18% livestock and poultry production, 1% vegetable and fruit crops and 9% field crops. The majority of growth in agriculture is accounted for by expansion in nursery crop production, primarily by an increase in ornamental and bedding plants rather than Easter lilies and bulbs which have traditionally been the largest nursery items produced.

The consistency of agricultural production in Del Norte County will continue to be an important factor in our local economy. With increasing urban pressures on other agriculturally productive areas of the state, the demand for agricultural products that could be grown in the county will probably increase.

Policy for Agricultural Soils

1. Agriculture and agriculturally-oriented activities should be protected from development practices that erode their economic viability.
2. Protective zoning for agricultural land should be enforced by restricting residential, commercial, industrial or other uses unless they are directly related to the needs of agricultural production.
3. The county should maintain in agriculture those lands most suited to the production of agricultural crops by restricting inappropriate development on prime soils and directing future development to non-prime soils.
4. The County should maintain in agriculture those lands identified as prime agricultural soils in units of 20 acres or more, of contiguous ownership by prohibiting the divisions of these lands into acreages of less than 20 acres.

Upland Soils

Most of Del Norte County consists of steep uplands and rough mountainous terrain with conifer forest vegetation. The soils of this upland area are numerous but they do have some factors in common: they are mostly erosive in character; have severe limitations to septic tank filter fields, possess shrink-swell behavior limitations and are on gradients not readily suited to development. The current and the most reasonable use of these lands is wildlife habitat, recreation, watershed, scenic value and most important, timber production.

More than three-fourths of Del Norte County consists of commercial forest land. Of the approximate 487,000 acres of such land, over two-thirds is publicly owned (Six Rivers and Siskiyou National Forests) and slightly less than one-third is privately owned. More than half of the commercial forest land is occupied by Douglas-fir with Redwood amounting to 15%. All softwood types combined account for 80% of the commercial forests and hardwoods the remaining 20%.

Tree species found on the commercial forests land of Del Norte County include:

Softwoods

Redwood
Douglas-fir

Sequoia sempervirens
Pseudotsuga menziesii

Ponderosa pine	<u>Pinus ponderosa</u>
Jeffery pine	<u>Pinus jeffreyi</u>
Sugar pine	<u>Pinus lambertiana</u>
Western white pine	<u>Pinus monticola</u>
California red fir	<u>Abies magnifica</u>
White fir	<u>Abies concolor</u>
Grand fir	<u>Abies grandis</u>
Incense-cedar	<u>Libocedrus decurrens</u>
Port-Orford-cedar	<u>Chamaecyparis lawsoniana</u>
Sitka Spruce	<u>Picea sitchensis</u>
Western hemlock	<u>Tsuga heterophylla</u>
Mountain hemlock	<u>Tsuga martensiana</u>
Western Red cedar	<u>Thuja plicata</u>
Lodgepole pine	<u>Pinus contorta</u>

Hardwoods

California black oak	<u>Quercus kelloggii</u>
Tanoak	<u>Lithocarpus densiflorus</u>
Red alder	<u>Alnus rubra</u>
Pacific madrone	<u>Arbutus menziesii</u>
Bigleaf maple	<u>Acer macrophyllum</u>

Goals - Upland Soils and Timber Production

1. Reserve in timber production those soils capable of producing commercial timber stands.
2. Minimize disruption to viable timber producing areas.

Forest products is the major industry of Del Norte County (see Overall Economic Development Plan, 1975 Del Norte County). The singular importance of forest products for the county cannot be over estimated. The forest products industry provides the market for other industries, such as trucking, heavy equipment, machinery, repair and maintenance, and others. In addition, the payrolls generated by forest products and its allied industries contribute substantially to the retail, professional and public sectors of the local economy.

Forest lands are important to other factors of the Del Norte economy. Forest lands provide the scenic values, wildlife habitat, watershed which provides clean attractive water, and general outdoor recreational value to our tourist economy. The watershed factor is important in producing relatively clean streams for anadromous fish, particularly salmon, and our local commercial and sport fisheries. The watershed factor is also important in the control of silt buildup and consequent flooding of the river bottom lands. Forest lands are important to the way of life of Del Norte residents in that forest lands provide the basis for our local economy and are important to our outdoor recreational activity.

Policy for Commercial Timber Lands

Preserve, protect and manage the Commercial Forest lands of the county as both a natural wild habitat and a productive economic resource.

1. Commercial forest land and timber product activities should be protected from development practices which erode their economic viability.
2. Commercial forest land should be protected from incompatible uses and only those uses related to and compatible with sound forestry practices should be allowed.
3. Commercial forest lands should be recognized as a resource in its own right as well as a protector of many other resources and be maintained as such.
4. The County should maintain in a commercial forest land use those lands possessing climate and soils suitable for growing commercial conifer timber crops, (including spruce). Those upland soils with timber sites I through III which are in parcels of 20 acres or more should not be allowed to reduce in parcel size below 20 acres. Coastal soils of 20 acres or more of which the parcels are intended for commercial timber production should be included.
5. The County should continue to co-operate with the Six Rivers and Siskiyou National Forests in the management of all National Forest Lands within the County. The County should strongly support the concept of multiple use of all forest lands, emphasizing commercial timber production, recreational and resource values.

Water Resources

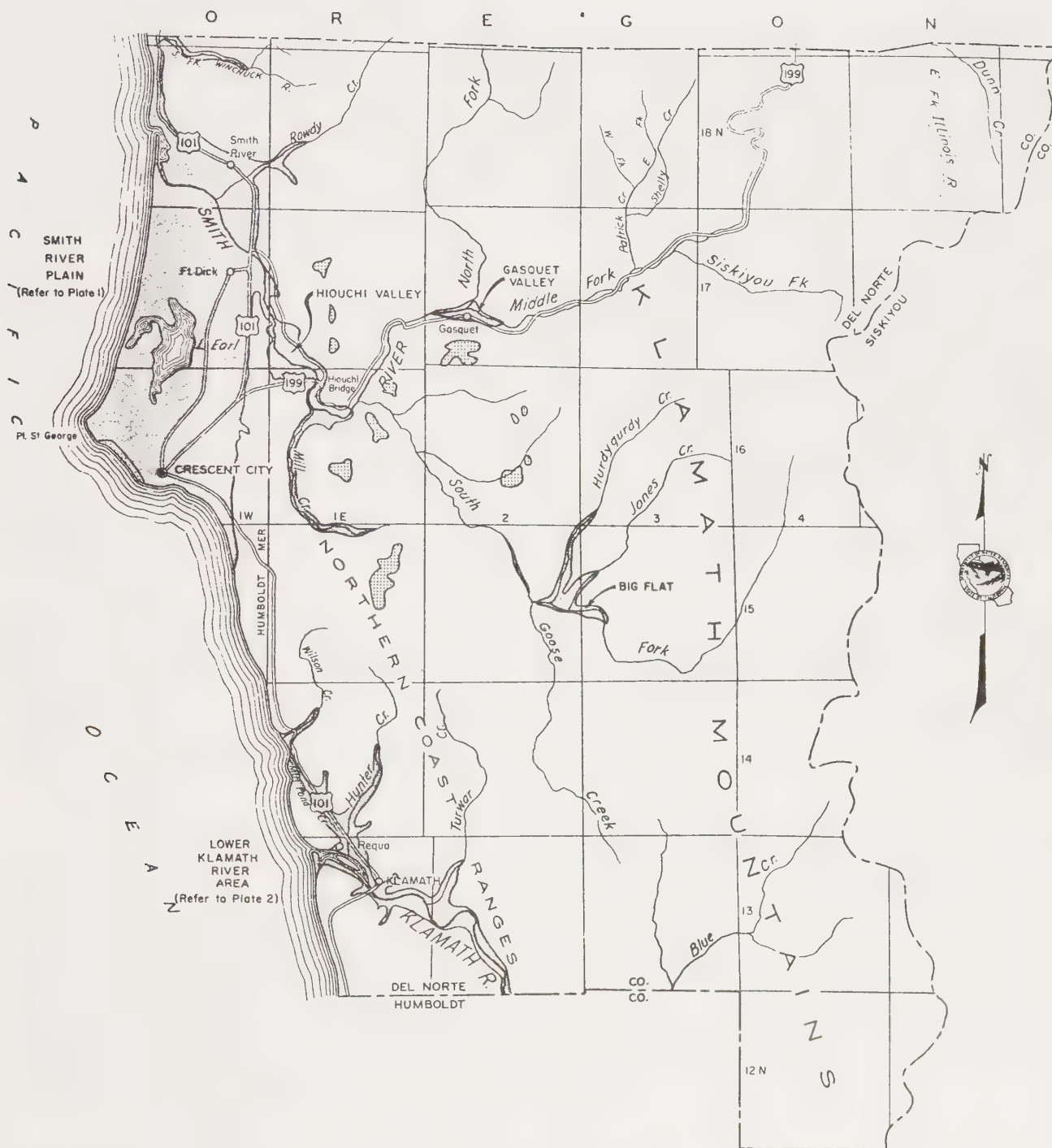
Goals

1. To insure sufficient water supplies of good quality for all beneficial uses through watershed management, forest conservation, and waste management.
2. To conserve ground water resources and prevent overdraft of existing ground water supplies.
3. To insure flows of adequate quantity and quality to provide needed surface water supplies and to protect fisheries.

Development and use of ground and surface water in Del Norte County has occurred almost entirely in three general areas; the Smith River Plain, the lower Klamath River area, and on river terraces adjacent to the Smith River. Minor withdrawals of ground water or surface water occur along other small rivers or creeks. (see figure 1) The remainder and by far the greater portion of the county, is mountainous and almost entirely uninhabited, with but little or no supplemental water requirement.

With the exception of steeply sloping mountainous areas, which are conducive to rapid surface runoff, there is a general excess of ground and surface water available for present and predicted

Water Resources Figure 1



future water requirements within the county. Water level measurements indicate that ground waters extracted each year by pumping are replenished during the period of high precipitation.

Surface Waters

The mountainous areas of the county are generally steep and rugged which, coupled with frequent seasonal and at times, intense storms, accounts for rather heavy and rapid runoff with the larger drainage basins. This rapid runoff creates the problem of periodic flooding. In contrast, during the summer months surface water from individual streams may be no more than adequate for present water requirements. In such cases, the water supply is often supplemented from ground water sources.

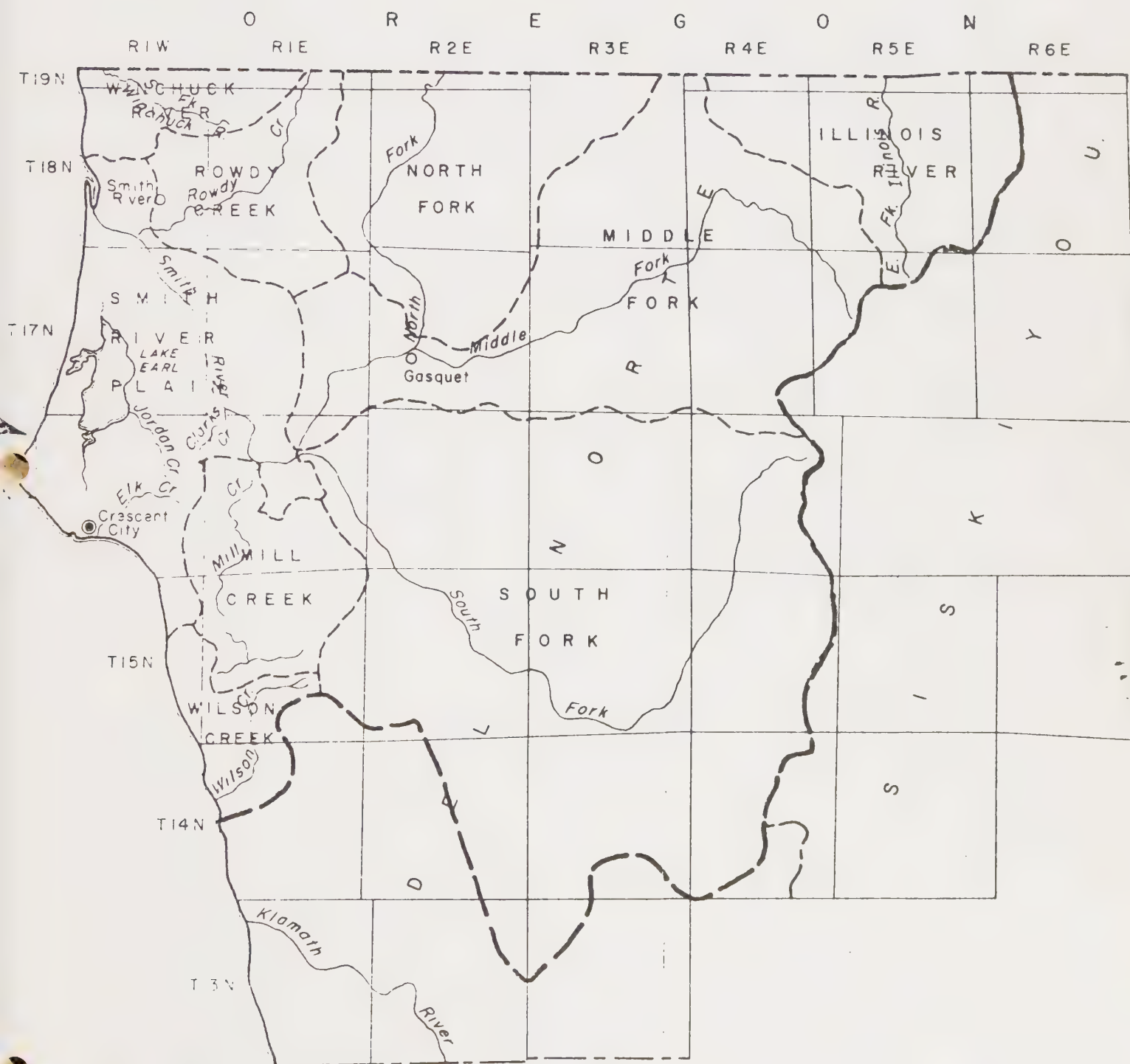
The Smith River, which rises in the easternmost portion of the county, lies wholly within Del Norte County, excepting a small portion of the North Fork, which lies in southern Oregon. The 50 year mean annual, full natural runoff for the Smith River is estimated by the Department of Water Resources at 2,640,000 acre feet. The annual runoff approximates almost seven acre feet of water per acre per year. Variation in stream flow are indicated by the stream-flow record of water year 1960-1961. During this year flows indicate a maximum level of 760,500 acre feet for March and a minimum flow of 16,930 acre feet for September. (The total water flow for 1960-1961 was 2,998,000 acre feet or 110% of the average annual flow.)

The Klamath River enters Del Norte County from the southeast, draining 140,000 acres of the county before discharging into the ocean near the community of Klamath. The 50 year estimated full natural runoff for the Klamath River is 12,000,000 acre feet. Although somewhat regulated by reservoirs up river from Del Norte County, the recorded water flows for 1960-1961 were 2,176,000 acre feet for March and 184,000 acre feet during October.

Lakes Earl and Talawa, the only significant water bodies in the county, have a drainage basin of 27 square miles. The only substantial tributary is Jordon Creek which enters the lakes from the east. (Water volumes flowing into the lakes are augmented by ground water sources.) Both lakes are shallow with a mean depth of 4 feet and reaching up to 20 feet in the channel which connects the two lakes. The lakes, which cover 2300 acres, were originally part of the Smith River drainage and during period of high runoff occasionally are augmented directly by the Smith River. *The remainder of the county is drained by minor rivers and streams with similar variations in flow patterns. (See figure 2)

* Surface drainage on the coastal plain is not fully understood and investigation into exact drainage courses is needed.

Water Resources
Figure 2



SUBUNITS OF SMITH RIVER HYDROGRAPHIC UNIT

Less than 1% of the average, total annual, surface water runoff in Del Norte County is used. The Department of Water Resources estimates that about 50% of the water requirements within the Smith River drainage basin are supplied by diversion of local stream runoff and the remainder by pumping of ground water.

Ground Water

Each year ground water levels are recharged by infiltration of surface water. In addition ground water may receive subsurface inflow from higher elevations during the year. Normally, ground water basins in Del Norte are readily recharged because of the abundant water supply, the high permeability of the ground surface formation and the low relief of the land surface.

The amount of recharge is partially depended on hydrological and geological characteristics of individual formations. The sand dunes and flood plains are rather permeable and readily replenished. The terrace deposits are less permeable. The Battery formation and alluvial fans are the least permeable, due to their clay content, and are not as readily replenished.

It has been estimated by the Geological Survey that the ground water basin of the Smith River Plain has a storage capacity of 90,000 acre feet between the depths of 10 to 35 feet. The marine terrace or Battery formation, because of its areal distribution contains the largest supply of water. The flood plain and sand dune deposits are the most permeable formations and have the largest quantity of readily recoverable water. Records show that ground water varies in depth from 28 to 60 feet with existing wells in the area ranging from 19 to 35 feet. Well yields in the Battery formation are large enough for domestic and limited irrigation use. Attempts to develop deeper wells from the underlying St. George formation have been failures.

With a relatively large underground storage available, considerable ground water is used for both domestic and agricultural purposes. The largest water service agency, Crescent City Municipal Water Department, obtains its domestic and municipal water supply from an underground collection system adjacent to the Smith River. Of the total estimated water use in Del Norte County, it has been approximated that 40% was used for irrigation, 35% for municipal and domestic purposes and 25% for lumber mill operations. Between 40% and 50% of the total consumptive use of applied water is met by pumping ground water.

Quality of Water

Within the major ground water basins of the Smith River Plain and the lower Klamath River, the mineral quality of undisturbed natural ground water is generally excellent. Although there are minor variations in the concentration of dissolved mineral constituents in the natural ground water (such as the higher iron content

of the sand dune areas), these constituents are seldom of sufficient concentration to render the water undesirable for any beneficial use.

The good quality of native ground waters in the ground water basins is primarily the result of adequate annual rainfall for ground water recharge and favorable seaward gradients which have provided a flushing action within the aquifers.

Quality of ground water is lowered by allowing wastes or degraded water to enter directly or infiltrate into the producing aquifer. Ground water impairment can result from one of, or combination of, the following: sewage discharge, surface runoff or flooding, industrial wastes, and irrigation return.

Within Del Norte County a large portion of the population is dependent upon individual household water supply and sewage disposal systems. The relative abundant water supply, close to the surface and the close proximity of sewage disposal sites to shallow wells, creates a constant threat of impairment and contamination to ground water. The wells which are frequently contaminated on a localized basis, are those wells which range in depth of 10 to 20 feet (usually not drilled by professional drillers). Wells over 31 feet are considerably less susceptible to contamination under the same circumstances. The smaller lot size areas of the county, which have individual sewage disposal accompanied by shallow wells on soils of poor drainage are the current problem areas of the county concerning water quality.

Lumber, commercial fishing, and mining are the major waste-producing industries presently operating in Del Norte County. Lumber and commercial fishing have adequately monitored their wastes and have not caused any significant impairment to ground water quality. Mining is presently at such a low volume so as to not create any water quality impairment, however any future expansion of mining activity will be closely watched by the North Coastal Regional Water Pollution Control Board.

Irrigation return water may now contain various amounts of the dissolved residuals of chemical compounds from the application of various pesticide and fertilizer compounds. Impairment can result from these applications, however no serious problem has been determined and the likelihood of a problem is in direct proportion to the amount of application.

The intrusion of sea water usually results from overdraft of ground water, and the reversing of the natural seaward movement of fresh water. This condition allows salt water to move landward into the ground water basin. Sea water intrusion is indicated by increases in mineral content, and is particularly notable in the chloride ion. Mineral analysis of coastal wells indicate no high concentration of chlorides which can be directly attributed to sea water intrusion.

Although surface waters are generally of excellent mineral quality, there is a significant problem of high turbidity (finely suspended material) during periods of increased flows.

Policies

1. The County should seek to establish joint policies and agreements with local water distribution districts for the purpose of assuring proper water management operations which will consider long-term municipal, industrial and agricultural requirements.
2. The County should develop programs to reduce excessive consumption of water, thereby reducing the quantity of sewage effluent into the county's groundwater reservoirs.
3. Conversion of the coastal dunes to residential use should be discouraged. Residential development should be guided from these areas, recognizing their importance as ground water recharge areas, barriers to sea-water intrusion and their severe limitation to individual sewage effluent.
4. All existing and future water quality standards should be followed and further investigation of the effects of water contaminants be supported.
5. A coordinated and integrated approach should be taken towards solving water supply and demand problems.
6. The County should seek to identify and map the drainage system of the coastal plain and take adequate measure to insure the continued existence of these drainage systems. Consideration of manmade drainage courses should be examined in an overall drainage plan.

Flood plains - see Seismic Safety and Safety Element

Extractive Resources

Goals

1. To ensure that extractive resource deposits will be accessible when extraction becomes necessary.
2. To ensure that extractors of natural resources take necessary precautions to prevent accidents and minimize nuisance factors as a result of their operation.
3. To protect other natural resources from damage as a result of extraction and prevent incompatible land uses.
4. To ensure sufficient rehabilitation of extraction sites following discontinuation of activity.

There are presently no major large scale commercial mineral extraction operations in Del Norte county. However two minerals are available in sufficient quantities to warrant consideration of potential mining operations. These are chromite ore and laterite ore.

There are some 70 chromite mines located primarily in the drainage of the North Fork of the Smith River. Approximately 40 of these mines were in operation at the time the Federal Government stopped stockpiling chromite ore in 1958. Since then low cost imports have dominated the market. Recently there have been some major price increases for imported ore which indicates the potential for renewed interest in local deposits.

Low-grade laterite ore is found in relative abundance within the county. Some 75,000 acres of low-grade laterite is available for recovering nickle and cobalt. Laterite production requires large amounts of initial capital to establish a processing operation.

Active mineral extraction in Del Norte County consists of rock quarrying and sand and gravel operations. There are usually one or two commercial rock quarries in operation. Sand and gravel operations are primarily located on the Klamath and Smith Rivers with the latter being the location of the majority of operations. These operations are both commercial, large and small scale and private (Mostly local farmers).

The effects of rock quarry operations are generally limited to the immediate area of operation. Effects which are of concern to surrounding residents are dust, noise, truck traffic, adverse effects of blasting and aesthetic appeal. Remedies to these effects would be to consider the location of a proposed quarry and its effects on local traffic and views, the control of dust emissions by the operator, the limiting of size of blast and hours of detonation, and screening with existing vegetation to minimize aesthetic loss. Measures to control erosion and steps to replace topsoil and native vegetation on the site after the discontinuation of activity should also be considered.

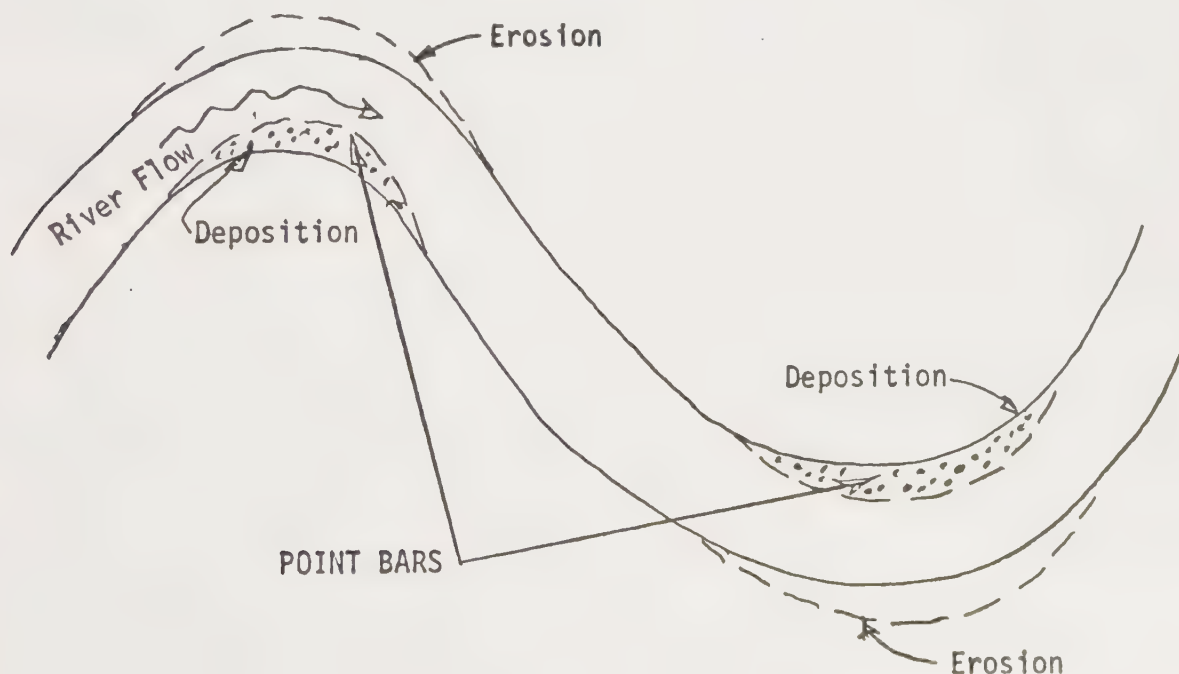
Sand and gravel operations in riverwash areas have rather limited effects on the immediate area, primarily aesthetic appeal, however their effects upon the river itself are not fully known. Resort owners and fisherman groups have claimed that these operations have damaged the river channel and contributed to a decline in fishing and anadromous fish runs along the river. On the other hand, the sand and gravel extractors are essential to the construction industry and therefore essential to the present and future economy of the county.

Gravelly bars occur along the main branch of the Klamath River from the Klamath townsite south for about 20 miles. Bars range in width from 1/4 to 1/2 mile near the ocean and diminish in size upstream. The bars in general have no overburden and are replenished during flood stages.

The Smith River is the more actively used river channel for sand and gravel operations. There are ten major gravel bars along the lower Smith in the 13.8 mile reach from the Hiouchi Bridge to the ocean. The average replenishment rate of the gravel is estimated at 330,000 cubic yards per year, extraction records indicate that an average of about 180,000 cubic yards are withdrawn commercially from the river and about 15,000 cubic yards annually are

privately removed. The bars in general have no overburden and are replenished during flood stages. The bed material is deficient in small particles, but is otherwise an excellent aggregate source. The gross value of sand and gravel taken from the Smith River currently averages about \$100,000 annually. The industry employs from about 12 people in the winter to about 50 people in the summer, including asphalt mixing and paving activities, and has an average annual payroll of \$38,000. Gravel extractions have been beneficial to the lower Smith River by removing excess gravel which would have extensively filled some of the large holes downstream from Dr. Fine Bridge. This is not to say that necessary and prudent precautions are not necessary.

The proper location of the gravel extraction is very important in maintaining stream stability in both course and gradient. Along the lower Smith River there are five point bars which afford good to excellent borrow material sources. (A point bar is the area of deposition on the convex, or interior, side of river curves.) On the Smith River Plain these sand and gravel bars develop on the inside of a growing river meander by the addition of sediment accompanying the migration of the active channel toward the outer bank. An example is the Rowdy Bar. Above the Smith River Plain, other point bars occur where the outside of the channel is cutting into bedrock and deposition is occurring on the inside of the meander. Examples of this type are the Huffman Bar, Brundeen bar, Bettencourt Bar, and the Simpson Bar. In general, at the point of maximum curvature on the meander, erosion slightly exceeds depositions, while immediately downstream deposition will exceed erosion.



Policies for Extractive Resources

1. The County should support studies to locate deposits of extractive resources and the establishing of extraction quotas if deemed necessary.
2. Operators of extraction operations should take all precautions necessary to avoid contamination from waste disposal or general operation activity of the site, nearby streams or rivers, air and the environment in general. Existing and future local, state and federal regulations will be met or exceeded.
3. No extraction should be permitted in areas where it would significantly harm, alter or destroy wildlife habitat, fisheries or archeological or historic sites and no adequate mitigation measures are deemed adequate.
4. Areas of known extractive resources should be protected from incompatible development which would seriously interfere with extractive operations.
5. Sand and gravel extractions along local streams and rivers should continue as long as the replenishment rate is not exceeded. To reduce impact on stream course, removal of sand and gravel from point bar deposits is recommended and should be critically examined along straight reaches.
6. The County should prepare and adopt a Resource Extraction ordinance and conditions of approval of extraction permits should include performance standards (dust emission, noise generation, blasting, etc.) and a rehabilitation plan and schedule if deemed necessary.
7. The County should consider the requirement of performance and site rehabilitation bonds for extraction activities of a large scale or in sensitive areas.

Wildlife, Habitat and Vegetation

Goals

Conserve and manage areas required for fish, plant and wildlife conservation, and the fulfillment of aesthetic recreational, educational and economic needs of present and future residents and visitors.

The wildlife resources of Del Norte County are numerous, diverse and valuable to its residents. Wildlife has recreational, commercial and other values to the county. The Smith and Klamath Rivers and their tributaries, have important runs of salmon and steelhead, and to a less extent cutthroat trout. These runs provide the basis for extensive visitor and resident recreation in the form of sport fishing. Off shore the schooling of salmon, in preparation of their up-river run, provide the basis of the local commercial

fishery. Fresh water sloughs and lakes of the county serve as feeding, nesting and resting areas along the Pacific Flyway migratory route for approximately 25 species of waterfowl. These birds provide local residents and some visitors the basis for local game bird hunting. Because of game birds, large game animals and anadromous fish runs, hunting and fishing are major fall and winter recreation and provide needed stimulus to our local economy. Wildlife in a natural habitat have aesthetic and educational appeal and are a potential source of additional tourism.

A variety of wildlife now, and in the future, is important for the maintenance of the balance of nature and to the well being and enjoyment of man. Some species of wildlife may be of some medical or scientific or other value to man that is not known or completely understood at this time. Knowledge, enjoyment or other benefits that might be gained from wildlife is lost if the species is allowed to be diminished to the point where they are in such numbers that their use would result in their extinction.

Habitat is the key to the survival and well being of all wildlife. Without appropriate water, food and reasonably natural areas to dwell in, wildlife cannot exist naturally. Riparian habitat and the coastline are more important habitat areas in the County because of the number of species and total numbers of wildlife these areas support and their importance to the enjoyment of local residents and visitors.

The habitat located along or on the bank of a watercourse, river or stream and along the shore of a lake or tidewater area is referred to as a riparian habitat. The riparian ecosystem is a very productive wildlife habitat. It is essential for both migratory and resident populations of birds as it provides resting and roosting sites, feeding areas and escape from predators. Mammals utilize these areas for escape cover and for foraging. The mammals associated with riparian ecosystems are more secretive and less often seen as they tend to be found in heavier cover and are more active at night. Reptiles and amphibians commonly found around riparian habitats include several varieties of frogs, toads, salamanders, lizards and snakes. These reptiles are essential to the control of insects and in providing food source for birds and mammals. Trees and shrubs are very important to aquatic plants and animals as they provide enrichment and food in the form of leaf litter and insects that fall into the water. Shade and shelter are two other important functions of riparian vegetation. Without adequate shade, many streams would become too warm to support fish species such as salmon and trout and could be replaced by more heat-tolerant undesirable species. In addition, riparian vegetation acts as buffers to intercept and stop silt from entering bodies of water and also serve to reduce erosion.

The sand dune areas and sandy beaches above mean high tide line and bordering the ocean are commonly referred to as the coastal strand. Large areas of coastal strand habitat exist between the

mouth of the Smith River and Point St. George. The variety of vegetation growing in these areas varies from low-growing succulents to grasses such as dune bluegrass and European beach grass. Bush lupines and beach pines are found on the more stabilized dunes. Plants play an important role both in the formation and successive stabilization of dunes. Plants decrease wind speed and the amount of sand transported. As dune plants grow, the sand dunes associated with them grow. Most native shore plants have a low, spreading growth from which produces low broad dunes. Plants such as European beach grass have a more vertical growth and produce dunes that increase in height. These plants do not stabilize sand dunes in the dune-forming zone near the beach, neither do the native species of plants.

The coastal strand is very susceptible to human over-use. The grasses and plants which provide shelter for birds and animals and also provide soil stability are easily damaged by human activity (primarily motor vehicles and development for residential use). Breaks in the plant cover can rapidly change stabilized dunes into shifting sand which can damage other species habitat, alter drainage courses, block roads and effect nearby residential uses or established soils.

Sandy beaches make up 25 miles (56%) of the coastline of Del Norte County. This beach habitat serves as feeding and resting areas for a large number of shorebirds. Residents have historically enjoyed these sandy beaches for leisure walking, beach combing and for a wide variety of sport fishing. Clamming for razor clams and littlenecks, fishing for surf perch and surfnetting of smelt have been popular fishing activities.

Rocky beaches are approximately 20 miles (44%) of the County's coastlines. These areas support large numbers of different and varied bird species. Fishing from the rocky shores and jetties is a popular sport resulting in catches of bottom fish such as ling cod, flounder and red snapper.

Tidepools along the rocky shoreline provide important habitat for a wide variety of small marine animals, including sea urchins, starfish, sea anemones, mussels and crab. Offshore rocks serve as vitally important rookeries and roosting areas for numerous populations of resident and migratory bird species. The importance of Del Norte County's offshore rocks to wildlife is illustrated by the fact that Hunter Rock, Prince Island, Castle Island and False Klamath Rock support 46% of all the nests located on coastal rocks in the State of California. Many offshore rocks, particularly Castle rock, are used as migratory resting sites for California sea lions, steller sea lions, harbor seals and to a lesser degree, elephant seals. Clearly the rocky coastline of Del Norte is one of the most productive and attractive wildlife areas of the County and the State.

Significant Geographical Habitat Areas

Prince Island and Hunter Rocks
Tidal area of the Smith River
Lakes Earl and Talawa and their immediate marshland
Castle Rock
Marsh area of Elk Creek
False Klamath Rock
Tidal area of the Klamath River
White Rock
Sand dunes of Dead Lake
Crescent City Sitka Spruce Stand
Wetland of Sandmine Road and Highway 101

Rare and Endangered Species of Del Norte County

Aluetian Canada Goose
American Peregrine Falcon
Southern Bald Eagle
California Brown Pelican
Wolverine
Evergreen everlasting
Howell's sandwort
Leafy reed-grass
Short-lobed Red Indian paint-brush
Black crowberry
Del Norte daisy
Klamath Mountain eriogonum
Walso eriogonum
Western lily
Vollmer lily
Howell's lomatium
Indian pipe
Pityopus
Peck's sanicle
Bracted schoenolirion
Glaucous tauschia

Policies for Wildlife, Habitat, and Vegetation

1. The County should require Environmental Impact Reports to insure the protection of fish, wildlife and plant species in the area considered for development.
2. Development to "improve" the Klamath and Smith Rivers with flood control facilities should be carefully reviewed and evaluated. Efforts should be made to maintain the natural function of the rivers.
3. The County should maintain all existing species of fish, wildlife, and vegetation for their economic, intrinsic and ecological values as well as providing adequate protection of rare and endangered species.

4. Del Norte County should provide for diversified recreational use of fish and wildlife while providing preservation of their habitat.
5. The County should maintain forest lands in production under the multiple use concept which includes recreation and wildlife habitat.
6. Del Norte County should recognize and encourage the various uses of wildlife and their habitat, including such activities as passive watching, scientific studies, educational purposes and hunting and fishing.
7. The following areas are recognized as major locations of excellent wildlife habitat, native or natural vegetation and of aesthetic value. These areas should be maintained as wildlife habitat and protected from adverse activity. No further commitment to development should be allowed except that which is in the best interest of the public health, safety and welfare, or as noted.
 - A) All offshore rocks and islands (seaward of the mean high tide line) excluding Whaler and Battery Islands.
 - B) Inland of the mean high tide line to the first line of vegetation (except in the areas of coastal bluffs when the area will be to the crest of the bluff), excluding the harbor area.
 - C) Lakes Earl and Talawa and their immediate marshland, allowing continued agricultural uses.
 - D) Sand dunes and wet sand areas, excluding limited development in appropriate areas.
 - E) The tidal influenced areas of the Smith and Klamath Rivers. Commercial-Recreational and Public-Recreational development should be allowed but be carefully controlled to prevent significant alteration of the habitat areas. Gravel extraction should be allowed on a small scale consistent with local policy and state regulations.
8. The County should establish riparian corridors along local streams, creeks and sloughs to maintain their aesthetic appeal, wildlife habitat, control of erosion, and to provide natural vegetation separations between developed uses.
9. The County should establish selected woodland and forest areas to provide aesthetic appeal, wildlife habitat and natural separation between residential, commercial, industrial and other uses as warranted.
10. The County should pursue a cooperative role with the Forest Service in the protection and continued maintenance of all plants and animal species and their habitat.

Cultural Resources

Goals

To preserve the significant historical, cultural and architectural features of the County.

Historical sites and land-marks are unique reminders of the social, economic, and political history of Del Norte County. The archeological sites resulting from thousands of years of human settlement are among the most fragile non-renewable resources of the County. Local Indians kept no written records of their rich and varied cultures. Knowledge of their ancient heritage can be gained from traditions and folklore but only by the study of archeological remains can many cultural stories be determined. Also valuable are the paleontological resources, the fossilized remains of plants and animals contained in rocks and sediment.

Reminders and examples of Del Norte's unique and varied past have only been preserved on a small scale. Activities of man have altered or destroyed some examples. The tsunami of 1964 is an example of both nature and man's activity resulting in a significant loss of historic and archeological resources which the County possesses. Unrecognized structures have been publicly neglected and are reaching a stage of deterioration, beyond repair. Archeologica sites are often destroyed because their precise locations are not always known and because public knowledge of archeological sites often leads to their destruction by vandals and collectors.

The various historical land-marks and cultural sites can be helpful in attracting more visitors to the County. One of the most underused of these land-marks is the Crescent City Lighthouse, built in 1856. This fine historical museum is on a small island about 200 yards off the coastline of the harbor area, and is accessible on foot several hours each day during the low tide. The inside of the Lighthouse contains authentic artifacts from signaling vessels through the last hundred years. Historic places, sites and buildings can be restored, made accessible, and utilized for the purpose of securing the County's historic past, as well as to attract visitors to see and share in this rich cultural heritage.

In order to receive other than local funds for renovation and preservation of historic sites, the sites must be accepted into the National Registry Program, which required prior State approval of the site of land-marks. Map 1 locates the districts located in the County which are on the National Register (Yontocket, Old Requa, and Point St. George). In addition, the Forest Service has nominated Chimney Rock, Peak 8, and Doctor Rock to the National Register; they have currently been determined to be eligible for inclusion in the Register and are accorded the same protection.

The National Park Service and others are in the process of evaluating and nominating several other properties to the Register; some of those sites are: Camp Lincoln, the Crescent City Lighthouse, Point St. George Reef Lighthouse.

The following sites in Del Norte County have Registered State Landmarks in place:

<u>No.</u>	<u>Name</u>	<u>Location</u>
497	S.S. Emidio	Front Street, Crescent City
541	Brother Jonathan Cemetery	9th and Pebble Beach Drive Crescent City
544	Fort Terwer	Klamath Glen
545	Camp Lincoln	Elk Valley Road, 1 1/2 mile north of Highway 199
645	Crescent City Plank and Turnpike road	Elk Valley Road and Parkway Drive
649	Site of Old Indian Village	Pebble Beach Access, Pebble Beach Drive

There are many other areas of historical and cultural value possessing historical significance to the County, the State, and the Nation. Examples of those not yet registered or otherwise officially evaluated are Chinese Camp on Hurdgyurdy Creek, the Haight Home and the Bank Building in Smith River, the Combs Home in Crescent City, the Gasquet Eiffel Tower Replica, and others including several archeological sites.

Policies - The County should:

1. Work with the Del Norte County Historical Advisory Committee in identifying the cultural resources of Del Norte County, and process the necessary records and forms for submission of those features worthy of recognition and/or protection by the National Register, State Historic Landmarks program, or other appropriate official record.
2. Develop a program to encourage private individuals to preserve or rehabilitate cultural resources rather than destroying or allowing them to deteriorate.
3. Work with the Historical Advisory Commission, and local groups to improve the existing system of review for project impacts on cultural resources.
4. Encourage local and visitor knowledge and enjoyment, where appropriate, of our local cultural heritage.

SOME WAYS OF PRESERVING OPEN SPACE

Several techniques to acquire and maintain open space includes purchase, rights less than full ownership, regulatory devices, compensable regulations, and taxation and assessment policies. Availability and legality of these techniques will vary depending on State law, court precedents, and local circumstances. Local officials should thoroughly investigate the potential of these and other techniques to meet local open space and recreation needs.

PURCHASE

No legal problem is involved in acquiring lands for public use. The courts have long affirmed outdoor recreation as a valid purpose for expenditure of public funds. Negotiated purchase is not always possible due to high cost of needed open space land. A reserve fund for land acquisition enables an agency to take advantage of favorable changes in the offering prices of particular tracts.

RIGHTS LESS THAN FULL OWNERSHIP

Legal devices involving less than full title to land are easements, rights, leases, licenses, and lease-backs. Public entry is possible with some of these arrangements such as fishing rights. Others such as lease-backs offer an unusual opportunity for public agencies to acquire control of property and also derive an income from it. Easements can preserve a natural area or protect the flanks of highways as scenic easements. Public access may not always be possible or desirable. Scenic easements along highways conserve aesthetic values and offer recreation value for pleasure driving.

REGULATORY DEVICES

The normal regulatory powers of zoning and subdivision control by local governments can be used effectively to provide open space. Zoning cannot always withstand pressures for development and does not necessarily produce land for public outdoor recreation as does purchase. Zoning can help preserve existing land features. Density zoning can fix the maximum residential density for an area and permit reductions in individual lot sizes. This encourages economic use of land, flexibility in design, and provides a means of retaining open space at no initial public cost. Difficulties in zoning arise when individual zoning regulations are not related to a plan for future development. Too often zoning can become merely a holding action and can cease to provide open space as demands to rezone from other sources become vociferous.

Cluster development is a departure from traditional subdivision design with great potential. Sometimes, communities have encouraged large size lots to help guarantee open space. But, in the typical

smaller-lot subdivision, the idea of open space has often been lost completely. Consequently, some communities have suggested that subdividers group houses in a tighter more cohesive pattern. This saves money for the developer. He does not have to provide as much paving nor so many service facilities. He may benefit economically by leaving a sizeable portion of land open and deed it for common use of the residents. Bridle paths, playgrounds, wooded areas, and ponds can be developed instead of a hodgepodge of back lots. The open space of each cluster development can be planned to connect with others. Careful siting of publicly purchased land for schools, parks, and greenbelts can produce a unified network of open spaces.

COMPENSABLE REGULATIONS

Compensable regulations restrict the use of land and are a middle course between uncompensated regulations and public acquisition. They compensate the property owner for any drop in the value of his land caused by the regulations. Owners of land subject to compensable regulations are guaranteed that, whenever they choose to sell their land, they will receive a price at least equal to the value of the land immediately prior to its regulation. This value is determined by a special assessment made at the time the regulations go into effect. Land subject to compensable regulations remains in private ownership and presents no public maintenance costs while continuing to yield tax revenue. Public cost for compensable regulations is determined by the market price of land subject to them, and the cost is distributed over many years. If compensable regulations enhance the value of the land so that it sells for more than the owner's guarantee, no public expense is incurred.

TAXATION POLICIES

Tax policy alone cannot assure the realization of land use plans. Tax incentives or burdens may be ignored and land used for purposes contrary to community plans and welfare. Farmers granted preferential assessment to maintain their land for agricultural use may still choose to sell their land for high density development. Owners of large estates, whose land is desired for housing, may prefer to pay a high land tax rather than sell for development. Land value taxation is based on assessed value of land only and disregards the value of buildings. A beneficial effect of land value taxation is compact development causing more intensive use of land. Urban sprawl is reduced making possible cheaper, more efficient public improvements. Use of tax exemption to guide development has drawbacks. Extending the categories of land uses granted tax exemption simultaneously enlarges the tax burden on remaining properties.

ASSESSMENT POLICIES

Several variations of assessing real property at its fair market value have been tried or proposed. Higher assessments on open land can help to bring it into development. Lower assessments on open land offer an incentive to keep it open. Assessment based upon income derived from the property instead of the market value is another approach. The principal defect of attempting to guide development through assessment variations is one of equity. Landowners are assessed and taxed only at open space value rather than full market value. No assurance may be given that they will not sell for development when it suits their self-interest. Despite this, voters have sometimes been in favor of constitutional amendments for such special treatment to help preserve countryside about them.

The California State Legislature, in recent years, passed the Williamson Act as a means to preserve agricultural land. Under the Williamson Act, cities and counties can designate land as agricultural preserves of not less than 100 acres (although exceptions are allowed). Owners within these areas who sign contracts restricting the use of their land to agricultural activities receive tax benefits by the reduction of property assessment to reflect agricultural income.

The 1969 State Legislature eliminated further use of the original agreement and substituted a modified contract for all productive farmlands.

Allowed agricultural uses were expanded to include scenic highway corridors, wildlife habitat areas, salt ponds, managed wetland areas, and submerged areas. The concept of open space easements as a type of land use suitable for tax benefits was introduced. The minimum contract period is a mandatory 10 years. Agreements are automatically renewed after this time for another 10 years.

ACTION PROGRAM

Numerous financial arrangements are available to help implement local open space programs: local park and recreation improvement districts; special revenue bonds; bonds redeemed by future recreation revenues; current general revenues; use of direct entrance fees; use of private donations of cash or land; assistance from state and federal conservation and open space programs. The Open Space Plan will be an important asset to city and county agencies seeking to qualify for state and federal assistance. Adopting open space zoning regulations consistent with the Open Space Plan will help bring the other techniques of acquiring and maintaining open space into more active use. Establishing a schedule of development priorities and incorporating them into the city and county capital improvement programs will be necessary to implement the Open Space Plan.

The most important influence affecting implementation of the Conservation and Open Space Elements will be mutual cooperation between city, county, and state government agencies and institutions, and private landowners and corporations. The system of open spaces and greenbelts cross city, county, and private lands and jurisdictional boundaries. They can become a practical reality only if contributions of time, effort and money are generated by understanding and cooperation.

A beautiful and fulfilling environment cannot be given to people. They must want it, and value it enough to bring it into existence. To wait for the state and federal governments to require these things and then implement them begrudgingly and half-heartedly always detracts from their quality and success. Without citizen interest, enthusiasm, and participation, abundant sums of money may still not produce the desired effect. However, effort, enthusiasm, and money may be wasted and misspent without a master plan and a schedule of development priorities.

The following suggestions may be used to set up the framework of development priorities:

1. A local Open Space zoning ordinance should be prepared and adopted consistent with the Open Space Plan. Recommendations of the Conservation Element would be an integral part of the zoning regulations.
2. A waterfront development master plan should be prepared.
3. An Open Space System master plan should be prepared.
4. A master plan for regional reserves should be prepared by the county.

These conservation and Open Space programs will help bring maximum use and enjoyment of the land and its resources to the people of the county. They can be realized only if people see their value and desire to implement them.

RECREATION



Goals

1. To provide and maintain recreation areas for a wide variety of activities for all people in the County and visitors to the County.
2. To provide public access at selected points to areas of enjoyment and interest.

The generous quantity of open land and outstanding natural beauty of Del Norte County provides sufficient reason for planning programs to conserve and protect such resources. Since one of the County's major attractions is open space, maintenance of that amenity is essential in any program for future growth.

Existing Recreational Facilities

The Pacific Ocean, its beaches, coastal streams, rivers, lakes, the harbors, and forests provide numerous and varied recreational opportunities. Recreational development and access to these resources provide residence use and tourist attraction. Commercial and publicly owned recreational attractions add to the physical attraction of Del Norte County.

Tourist Attractions

Trees of Mystery: 4 miles north of Klamath on U.S. 101 is this forest of redwoods, some of which are carved into animal shapes. There is also an Indian museum at the site.

Klamath River Jet Boat Trips: Operate between Klamath and Roach Creek. Departs from dock just north of Klamath townsite for the 64 mile round trip up the Klamath River.

Undersea Gardens: In Crescent City at Citizens Dock, Anchor Way, features a panorama of sea plants, animals and fish viewed from underwater windows. Scuba diving shows are scheduled.

Redwood Empire: 300-mile scenic area traversed by the Redwood Highway (U.S. 101) includes Del Norte County among the nine counties in the empire. Six demonstration forests have been established in the Redwood Empire by the Redwood Regional Conservation Council, representing the redwood lumber industry; one of these is near Crescent City. Displays, including nature trails and brochures, point out how industrial forests are managed for timber production.

Redwood National Park: Congress authorized the establishment of Redwood National Park in October, 1968. Encompassing 58,000 acres, the area lies along the northern coast of California between the City of Crescent City and the town of Orick. Within its boundaries are included the 27,468 combined acres of Jedediah Smith, Del Norte and Prairie Creek State Parks, which remain as separate units governed by the California Department of Parks and Recreation. Recreational activities range from fishing

in streams for trout, salmon and seelhead, wandering through miles of redwoods, to digging in a wild beach reputed to hold \$1 billion in gold flakes. Trails traverse the 40 miles of wild and untouched coastline, along rocky promontories that protrude into the sea to vistas of sea-lion colonies and migrating whales. Side trips to points of interest within the park include Bald Hills Road, Gold Bluffs Beach, and Klamath Beach Road.

County Recreational Facilities

Florence Keller Regional Park	Never Dying Redwood Historical Site
Clifford Kamph Memorial	Klamath River Public Boat Ramp
Point St. George Fishing Access	Pala Beach Park
Smith River Public Boat Ramp	Klamath Old Town Community Park
Mouth of Smith River Fishing Access	Bertsch Tract Park (undeveloped)
Klamath City Park	Kellogg Beach Access
Klamath Glen Public Boat Ramp	Lake Earl Boat Ramps at
Pebble Beach Development	Buzzinni and Lakeview Roads
Ruby Van Deventer Park	Recreational Gym and Pyke Field
Del Norte Co. Historical Museum	County Fairgrounds

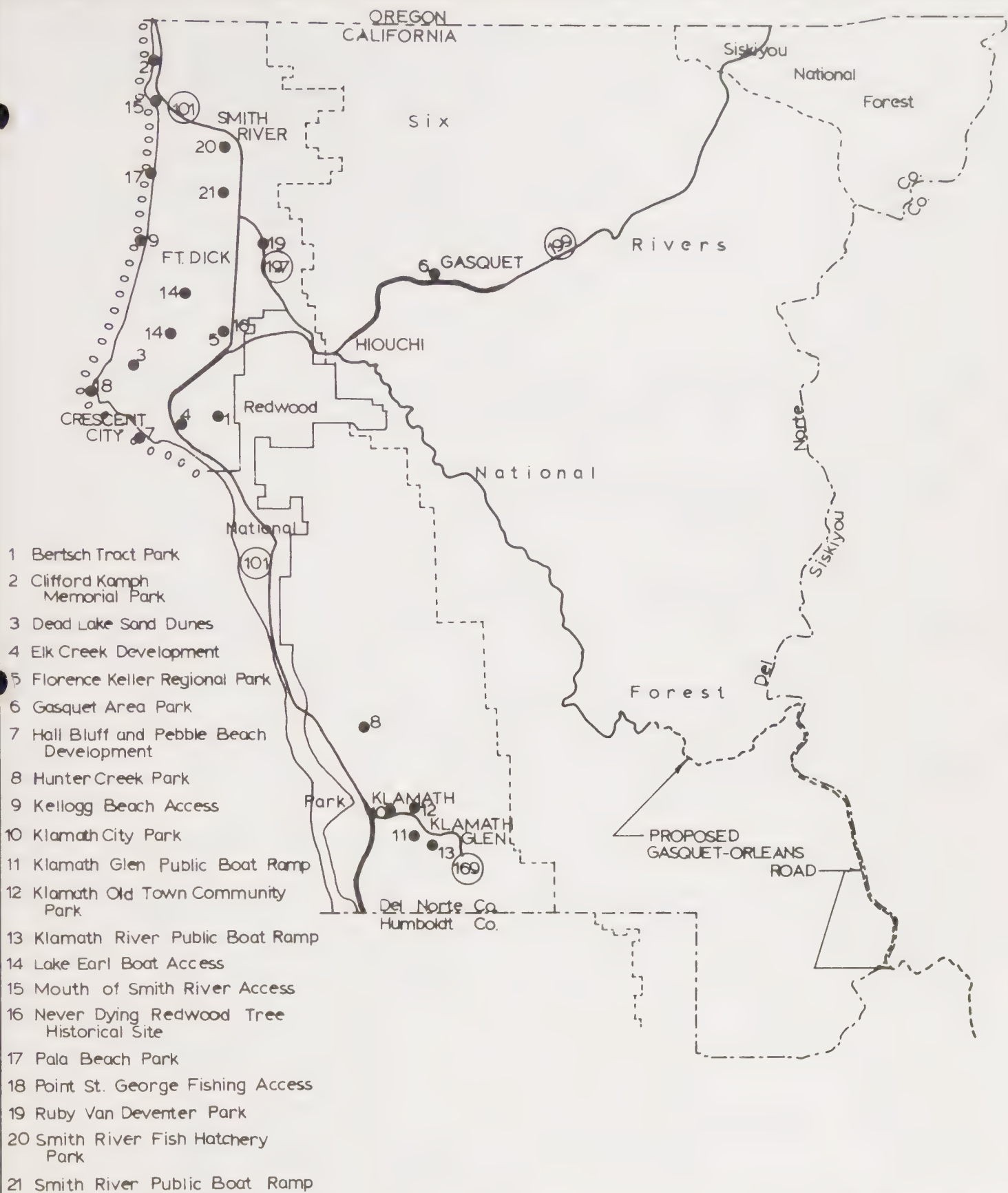
Crescent City and Harbor Recreational Facilities

Peterson Park	Harbor-City Bicycle Path
Brother Jonathan Park and	Preston Island (undeveloped)
Vista Point	Beach Front Park and Cultural Center
Tetrapod Area	Whaler Island (undeveloped)
Public Swimming Pool	Citizens Dock and Launching Facilities
Improved Beach Access at 4th, 5th, and 7th Streets	

Presently there are no municipal parks related to the schools in the City area. Two golf course are located outside of the City and Harbor area which are heavily used by local residents.

State & Federal Recreational Areas

	<u>Acres</u>	<u>Miles of Coastline</u>
Six Rivers National Forest	449,242.00	---
Redwood National Park	6,757.00	13.06
Pelican Beach State Park	5.15	0.2
Jedediah Smith Redwoods State Park	9,139.02	---
Del Norte Coast Redwoods State Park	6,375.02	7.03
Prairie Creek Redwoods State Park	200.00	0.5



Recreation Element

DEL NORTE COUNTY, CALIFORNIA

GENERAL PLAN

(The Six Rivers National Forest, which encompasses a great part of Del Norte County's interior region, and the Redwood National Park will need a substantial amount of improved access in order to materially enlarge the tourist and visitor days to the County.)

In addition to these specific sites the resource areas of the County have historically been a significant element of the County's recreational facilities and tourist attractions. As has been described in previous section, the rivers, streams, lakes, forests, dune and beach areas provide diverse and numerous recreational opportunities for County residents and visitors to the area.

Proposed Recreation Facilities

A number of problems regarding the optimum use of recreational sites in the County have emerged. Because of heavy rain and cool temperatures in the winter activity is mostly seasonal. In many cases, improvements could render these sites usable on a year round basis.

Since quality of recreational sites is a major attraction, it is necessary to prevent health hazards from holding tanks for portable sewage systems in recreation areas. Expansion and maintenance of adequate sewage systems is required.

Under consideration for the future are public-owned parks for overnight camping and trailer facilities to be located in the more urbanized areas of the County, and additional recreation harbor slips in the Crescent City Harbor area.

Public knowledge of all available recreational areas and facilities is lacking. Tourist information centers at entrances to the reception areas and in Crescent City proper help could alleviate this problem. Availability of information should increase demand. With increased demand, access routes will require improvement to accommodate users.

Tourism ranks as a major contributor to the economic base of Del Norte County. An increased program to expand the recreation/tourism potential of Del Norte County is needed. Expanding existing facilities, developing additional areas with recreational potential, and adding tourist information centers would assist in reaching this goal. Even with substantial increases in tourist spending, the tourist business is not expected to substantially increase the County's permanent population and employment forecasts.

For the Crescent City Area the following recreational sites and open land are proposed:

1. The improvement and expansion of all existing Recreational Sites.
2. The extension of Howe Drive to the Harbor.
3. The retention in permanent open space and recreation use of the city-owned property between Del Norte High School and the cemetery.
4. Development of Point St. George for varied recreational use. Three functions would be served by improvement and open space in this area:

Encroachment upon the airport would be eliminated from the westerly side.

Prevention of urban development on low-lying, poorly drained land with a poor subsoil.

Opening of access to an extensive piece of beach and shoreline area.

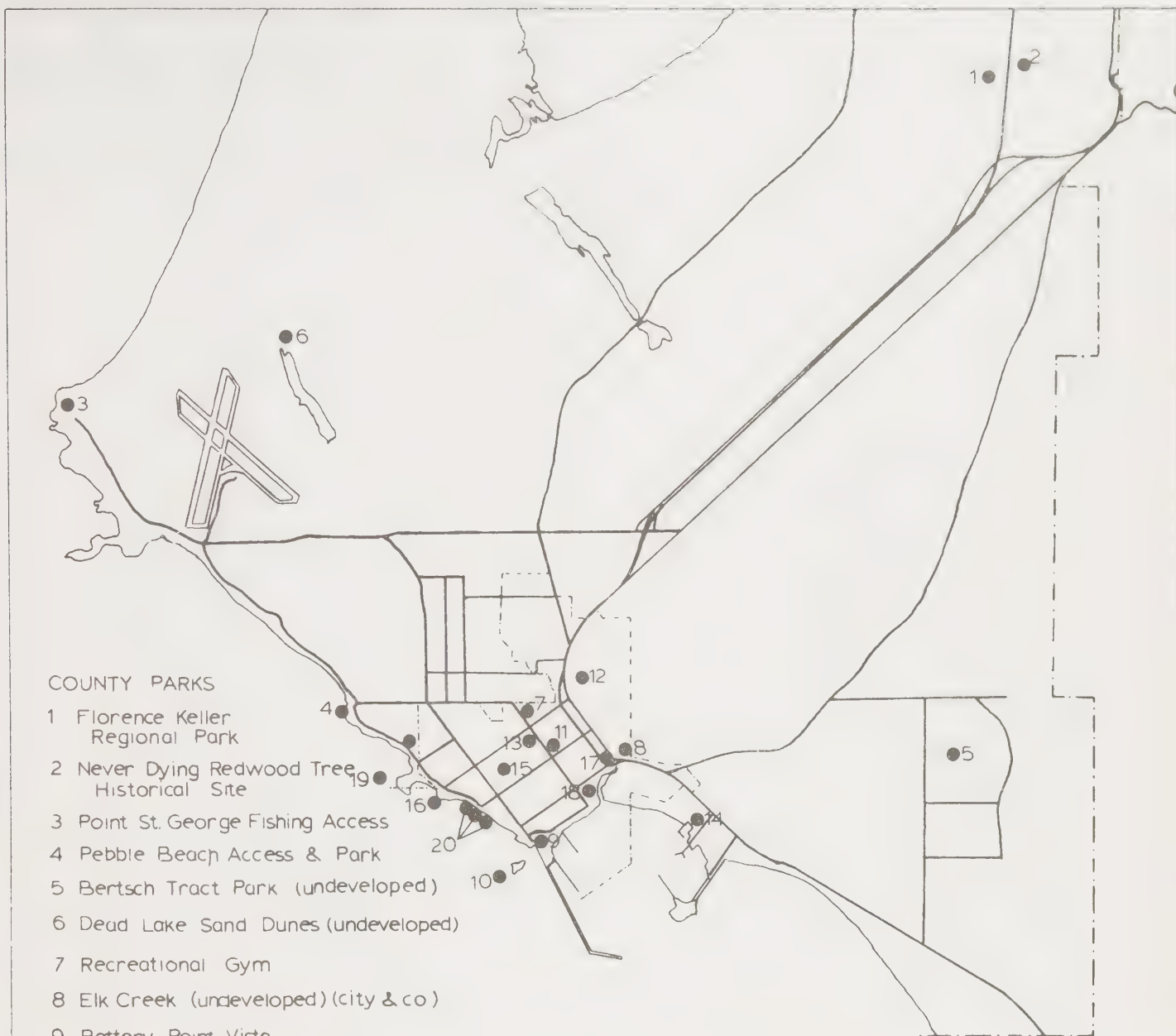
The Point St. George and Pelican Beach area should be protected from urbanization and over-commercialization. Although tourist use would be permitted, public use by residents should be the highest priority.

Del Norte County's residents enjoy practically 1,000 square miles of prime forest, beach and ocean resources. The major need of permanent residents in the Planning Area and the City is for indoor, community recreation programs. The great popularity of the community's all-year round swimming pool attests to this fact. Continuing study should be given, however, to the changing recreation requirements for people in every age and income group in the community.

There are numerous riding and hiking trails in Del Norte County. The planning and improvement of most of these will occur within the jurisdiction of the National Park Service, and will be located in the Redwood National Park and the Six Rivers National Forest. A bicycle loop trail is listed as a priority for development in Del Norte County. This trail would be located in the westerly part of the Planning Area, connecting Pebble Beach with Washington Boulevard and back through Crescent City.

Riding, hiking and bicycle trails can be located within a system of parks and open spaces in the Crescent City Planning Area that would connect the mountains to the coastline. These trails can begin in the mountainous regions, wind down along the rivers and creeks, and end up along the sandy beaches and ocean shoreline. They could also traverse utilities, easements and rights-of-way. Wherever possible they should cross over or under any roads carrying vehicular traffic into recreation areas. Unless specifically permitted to do otherwise, they would be located on public easements and rights-of-way.

The growing popularity of motor-bikes, dune-buggies and hotrod automobile racing as important recreational activities in American life today should be evaluated. These activities have special requirements for space; and bring with them special problems that have to be considered in their use. These activities have a few things in common. They all make noise; and they all can damage the natural environment to an extensive degree if permitted to operate without controls of any kind. Del Norte County has enough open land area to locate them in such a way as to satisfy the devotees of these sports, without doing irreparable harm to the important natural areas it wants to preserve in an untouched state.



COUNTY PARKS

- 1 Florence Keller Regional Park
- 2 Never Dying Redwood Tree Historical Site
- 3 Point St. George Fishing Access
- 4 Pebble Beach Access & Park
- 5 Bertsch Tract Park (undeveloped)
- 6 Dead Lake Sand Dunes (undeveloped)
- 7 Recreational Gym
- 8 Elk Creek (undeveloped) (city & co)
- 9 Battery Point Vista
- 10 The Lighthouse
- 11 Del Norte Co Historical Museum
- 12 County Fairgrounds
- 13 McNulty Pioneer Home

CITY PARKS

- 14 Harbor - City Bicycle Path
- 15 Petersen Park
- 16 Brother Jonathan Park and Vista Point
- 17 Tetrapod Area
- 18 Beach Front Park, Cultural Center and Swimming Pool
- 19 Preston Island (undeveloped)
- 20 Improved Beach Access (4th, 5th, and 7th Streets)

Crescent City Area

RECREATIONAL FEATURES



The following is the list of Del Norte County recreational and park sites proposed for future development. The sites are placed in order of priority, and are subject to change and development modifications depending upon future recreational needs and available funds.

Del Norte County/Crescent City Planning Area Parks - Priority List

1. Bertsch Tract Park
- * 2. Recreational Gym and Pyke Field
3. Hunter Creek Park
(Klamath Area)
4. Florence Keller Regional Park
(Hwy 101 North and Elk Valley Crossroad)
- * 5. Point St. George Fishing Access
(5 miles northwest of Crescent City at end of Radio Road)
6. Smith River Boat Ramps No. 1 and 2
(3 miles south of Town of Smith River, off Hwy 101 N)
7. Klamath City Park
(New Town of Klamath, southeast end)
8. Klamath Glen Public Boat Ramp
(4 miles east of Klamath; end of Terwer Riffle Road)
- * 9. Bicycle Loop Trail
(Westerly side of Crescent City Planning Area)
- * 10. Hall Bluff and Pebble Beach Development
(West side of Crescent City at end of 9th Street)
11. Gasquet Area Park
(Location to be decided)
12. Smith River Fish Hatchery Park
(on Dominee and Rowdy Creek in the Smith River)
13. Never Dying Redwood Tree Historical Site
(Hwy 101 and Elk Valley Cross Road)
14. South Beach Park
15. Dead Lake Sand Dunes
(Northeast of the Del Norte County Airport)
16. Klamath River Public Boat Ramp
(end of Klamath Glen Road)
17. Pala Beach Park
(Accessed by Kellogg Beach Road)
18. Klamath Old Town Community Park
(Northwest end of old town site)
19. Elk Creek Development
(Elk Creek Drainage Basin)
20. Klamath River Resional Park
21. Clifford Kamph Memorial Park
(on Hwy 101 North, Smith River near Oregon border)
22. Long-Range Recreational Area Development Possibilities:
 - (a) Lake Earl
 - * (b) Elk Creek Basin
 - (c) Wilson Creek
 - (d) Rowdy Creek
 - * (e) Point St. George

* Crescent City Planning Area Facilities

Policies

1. The County should continue to insure its quantity of open land and outstanding natural beauty through the maintenance of open space.
2. Improved and increased access to Six Rivers National Forest and the Redwood National Park should be encouraged by the County.
3. The County should protect agricultural land from excessive urban intrusion.
4. The following are recognized for their habitat and wildlife values and their existing and potential recreational uses should be maintained:
 - (A) Lakes Earl and Talawa
 - (B) Elk Creek Drainage Basin
 - (C) The Coastline
 - (D) The Harbor
 - (E) The many rivers, creeks and streams of the County
 - (F) The sand dunes and wet sand areas along the coast
 - (G) Coastal and interior mountain ranges
 - (H) Much of the alluvial plain
5. Outdoor recreation projects should preserve and enhance scenic and environmental values.
6. Priority for acquisition and development of parks and recreation areas should be given to those areas possessing special physical features and/or under pressure of being developed for non-recreational uses. Prioritizing should include standards for the acquisition development, maintenance, and renovation of park areas.
7. Development of areas for recreational use, on a fee basis, by private landowners should be encouraged.
8. The establishment of public access sites should thoroughly consider the environmental and economic impact on adjacent property owners and provisions should be made for adequate manpower to regulate such recreational development.
9. The development of a regional trail and path system linking residential areas to local recreational areas, Crescent City to the Redwood National Park and recreational areas to each other should be explored giving strong consideration to existing public and quasi-public rights-of-way including railroad rights-of-way.
10. The County should continue to provide indoor and outdoor program activities directed toward the needs and interest of all County residents and visitors to the County.

11. The County should strive to provide diverse programs with emphasis on coordinated planning between the City, the Unified School District, the State, Federal and private agencies.

SUBDIVISION



Land Subdivisions in Del Norte County

Lots Created

As of April 7, 1970, the Del Norte County Road Commissioner and County Engineer reported to the County Board of Supervisors in Crescent City, California, that a large number of "paper" subdivisions existed throughout the County. Listing 30 subdivisions which have been recorded from 1910 through 1964 (24 of which were unimproved, and six of which had partial improvements), the County Engineer demonstrated that 1,504.2 acres of unimproved land presently contained 6,890 unimproved lots. The table following lists the subdivisions recorded and effective for the coastal plain of Del Norte County. This list does not contain the Harbor Center Tract, created in 1931, which is currently entirely owned by Standard Veneer, a corporation. The list also does not include the subdivisions located in the Hiouchi, Gasquet and Klamath areas. These subdivisions are relatively recent in recordation (most after 1955) and are not as potentially problem-creating as the older subdivisions of the coastal plain. Located on the maps following the table, is the parcel development of the Crescent City Company and Janet Gourley. This development, though not a subdivision, created one acre parcels over an approximately 1000 acre area, during 1928 and 1930.

The recorded subdivision lots are legally recorded lots and though an owner may own more than one lot, he may sell a lot along recorded lot lines without a lot split application. The requirements of the Water Quality Control Plan for the Klamath River Basin regulate development of the parcels by physical constraints of water quality due to discharge of water. Legal access is provided on paper but physical access to each lot is, in most cases, not provided and is the responsibility of the lot owner prior to development. This supply of legally recorded lots on vacant, and in many cases, land of questionable utility is a matter of critical importance in respect to the County's future growth.

The major problems accruing from this situation may be stated as follows:

Economic activity in Del Norte County has not created a demand for these lots as building sites. They remain on the tax rolls; some become delinquent; and all represent a potential liability for municipal improvements and urban services.

Most of these unsold lots were subdivided and recorded without proper provision for utilities and services. The "developer" has completed his sales program and long departed the scene. By the time a lot-owner decides to build a home on the property, his costs go far beyond what a properly developed tract would require.

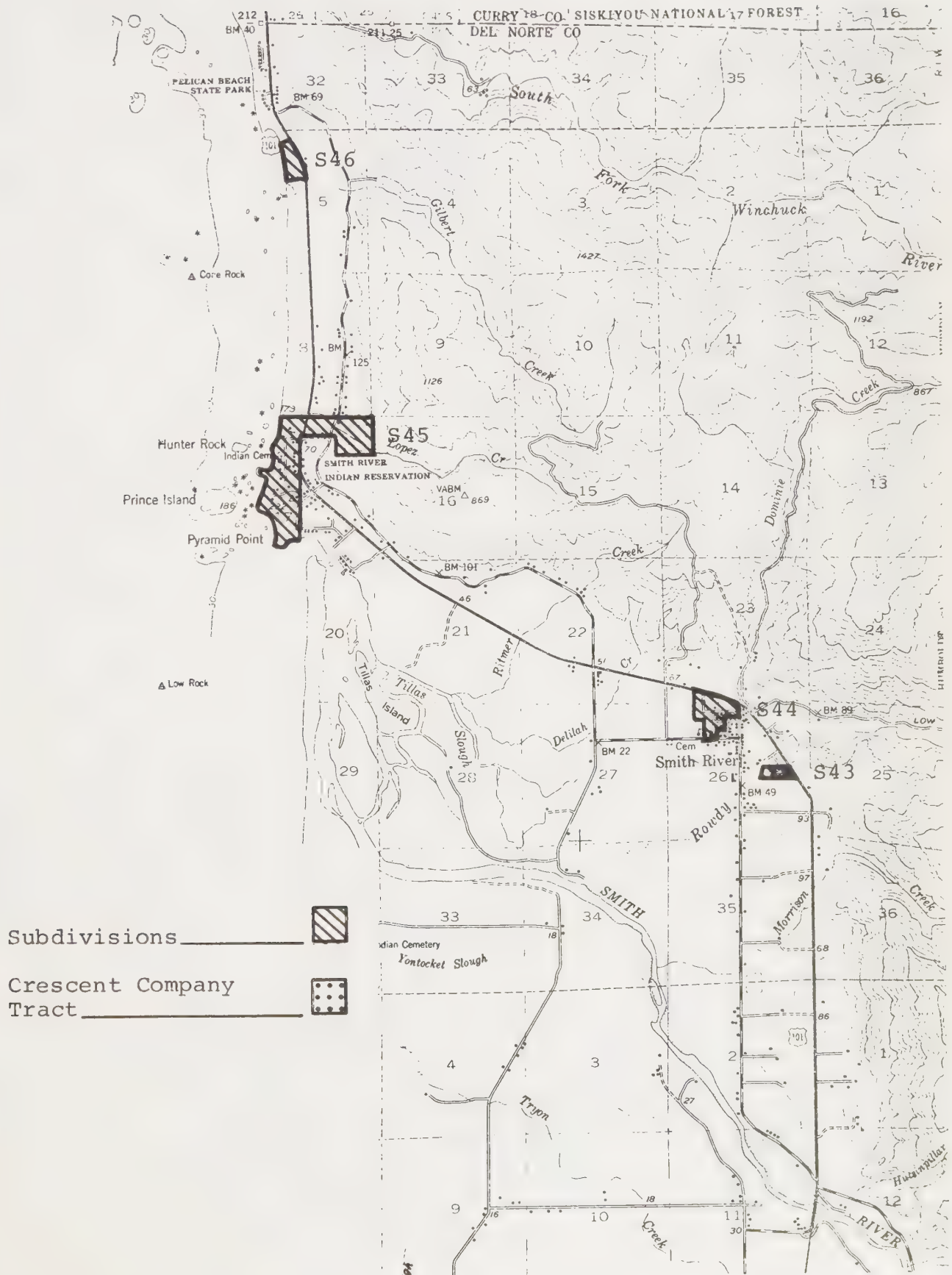
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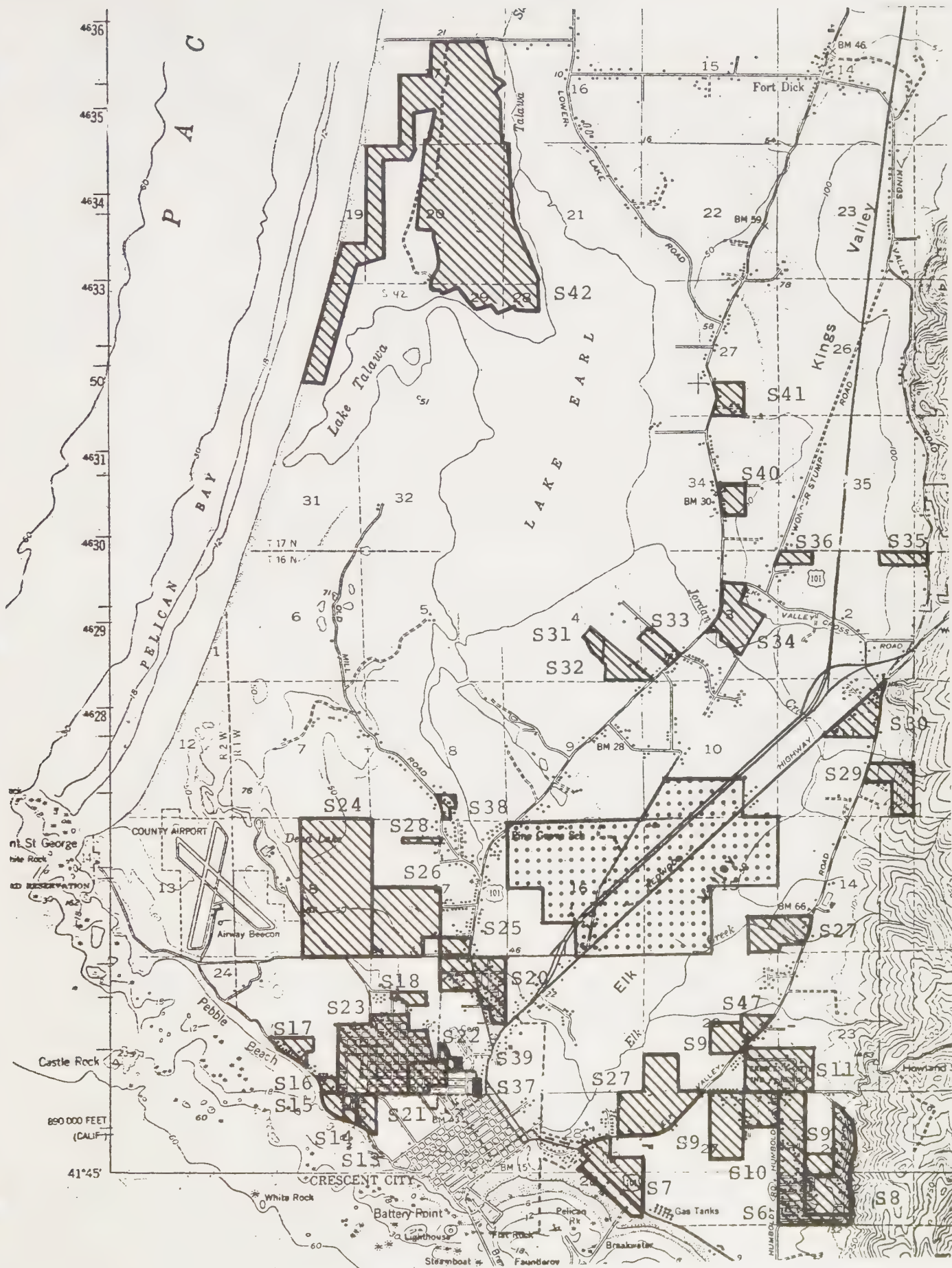
RECORDED SUBDIVISIONS OF
THE DEL NORTE COASTAL PLAIN
(April, 1975)

Map Number	Name	Year Recorded	Original Number Of Lots	Present Number Of Parcels	Number Of Homes	Percent Of Homes	Home Owners Exemptions	Percent Of Exemptions Homes	Percent Of Exemptions Lots
S-6	OCEAN VIEW 1, 2, 3	1924	871	243	96	40%	70	73%	29%
S-7	*WALTON DOCKS	1915	584	136	24	18%	9	38%	7%
S-8	BERTSCH OCEAN VIEW	1926	1,070	342	91	27%	58	64%	17%
S-9	HARBOR VIEW 1, 2, 3	1929	779	246	44	18%	28	64%	11%
S-10	METROPOLITAN	1930	174	37	21	57%	16	76%	43%
S-11	ELK VALLEY RANCHERIA	1961	23	36	26	72%	21	81%	58%
S-13	LAUFF	1912	148	74	53	72%	36	68%	49%
S-14	WHITAKER ADDITION	1927	103	62	44	71%	28	64%	45%
S-15	MAXWELL	1954	31	19	13	68%	11	85%	58%
S-16	CRESCENT BEACH	1928	71	39	24	62%	20	83%	51%
S-17	PEBBLE BEACH	1926	125	48	22	46%	12	55%	25%
S-18	CRESCENT CITY MANOR 1	1930	76	12	3	25%	2	67%	17%
S-20	*ROOSEVELT	1929	845	282	216	77%	108	50%	38%
S-21	AHREN ADDITION	1911	280	119	92	77%	55	60%	46%
S-22	MOORE ADDITION	1912	24	20	14	70%	10	71%	50%
S-23	FILKINS TRACT	1911	1,499	570	437	77%	292	67%	51%
S-24	CRESCENT CITY MANOR 2 and 3	1928	306	254	18	7%	11	61%	4%
S-25	CRESCENT PARK	1928	103	46	30	65%	21	70%	46%
S-26	BELMONT PARK	1928	949	94	24	26%	23	96%	24%
S-27	CRESCENT TRACT	1927	694	272	25	9%	17	68%	6%
S-28	SAUNDERS	1956	20	16	9	36%	9	100%	56%
S-29	CHURCH TREE	1973	49	49	1	2%	0	---	---
S-30	MEADOWBROOK	1951	62	58	43	74%	36	84%	62%
S-31	LAKESIDE ACRES	1965	20	20	13	65%	12	92%	60%
S-32	VIPOND	1953	21	33	28	85%	26	93%	79%
S-33	MAE-ESTA	1954	23	23	21	91%	21	100%	91%
S-34	HUFFMAN ACRES	1952	47	38	29	76%	27	93%	71%
S-35	VALLEY VIEW	1956	18	26	7	27%	7	100%	27%
S-36	WONDER STUMP MOBILE VILLAGE	1970	21	21	18	86%	17	94%	81%
S-37	BRAY ADDITION	1924	17	14	13	93%	7	54%	50%
S-38	OLD MILL	1951	21	21	19	90%	15	79%	71%
S-39	VILLA SITES	1912	68	19	16	84%	12	75%	63%
S-40	SANSIPER	1927	24	31	16	52%	15	94%	48%
S-41	MONTE VISTA	1931	162	31	19	61%	14	74%	45%
S-42	PACIFIC SHORES	1963	1,535	1,492	2	0.1%	1	50%	0.05%
S-43	DENBAR	1955	34	15	15	100%	9	60%	60%
S-44	WESTBROOK TRACT	1917	178	130	71	55%	50	70%	38%
S-45	SMITH RIVER RANCHERIA	1961	52	76	26	34%	17	65%	22%
S-46	PELICAN BEACH PALISADES	1964	20	20	3	15%	3	100%	15%
S-47	COWLEY	1953	11	18	6	33%	6	100%	33%
TOTAL			11,158	5,102	1,540	30%	1,043	68%	20%

*Partially within the City of Crescent City Limits.

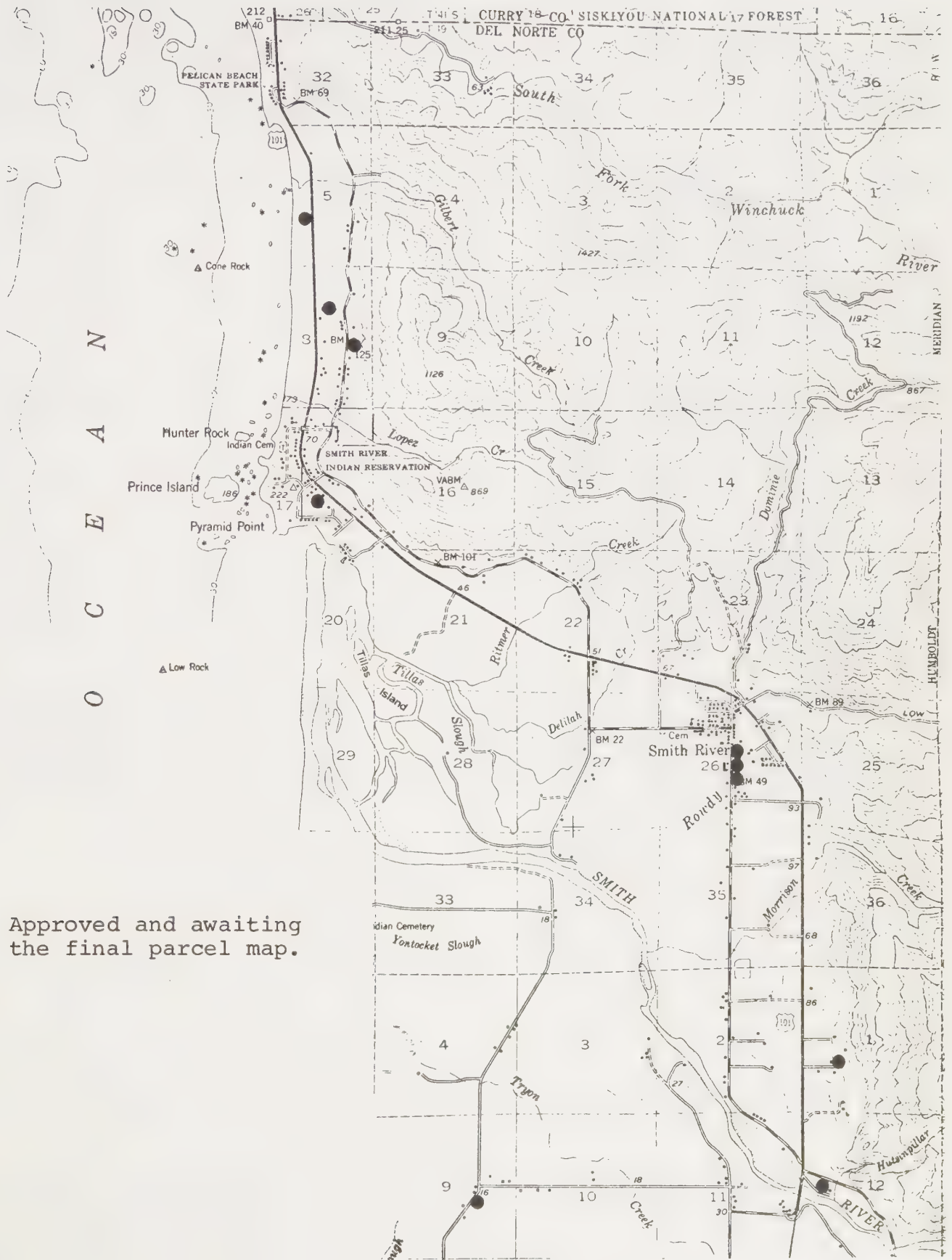
SUBDIVISIONS OF THE DEL NORTE COASTAL PLAIN





LOT SPLIT APPLICATIONS

1974-75



Approved and awaiting
the final parcel map.

These lots were recorded in the unincorporated portion of the County, removed from the kind of services available to vacant properties inside the city limits of Crescent City. Because this condition places a burden upon Del Norte County government to either supply, or assist property owners, in creating the facilities which should have accompanied the original subdivision of land, steps should be taken to prevent this type of development continuing to occur.

Many of the older subdivisions have been legally divided into substantial lots, which make them inadequate for today's requirements. In order for such legally subdivided lots to be considered adequate for building sites, they should be combined and grouped into larger lots or new layouts that will conform to current development standards. Those which have septic tanks and wells in close proximity present a health hazard of the first order.

The practice of subdividing and selling land in this manner is setting up virtually immutable patterns of substandard urban growth. Correction of the condition will be costly, time consuming, and a great disappointment to many who thought they were investing in inexpensive land in Del Norte County.

Recently the City and County co-operated in resolving the discharge problems of the Bertsch Tract area in establishing a community services district which utilizes the City's sewer facility. A similar district and system of disposal is planned for the Crescent City north area (Filkins Tract, Roosevelt Tract to Blackwell Land). This type of remedy provides urban development in the same area.

Lot splits have replaced subdivisions as the means of creating new parcels. The County requires of lot splits that legal access be provided, roads of adequate design, and a minimum of 20,000 square feet of viable land, other State, local and Federal requirements must also be met. Lot splits for the Calendar years 1974 and 1975 were as follows:

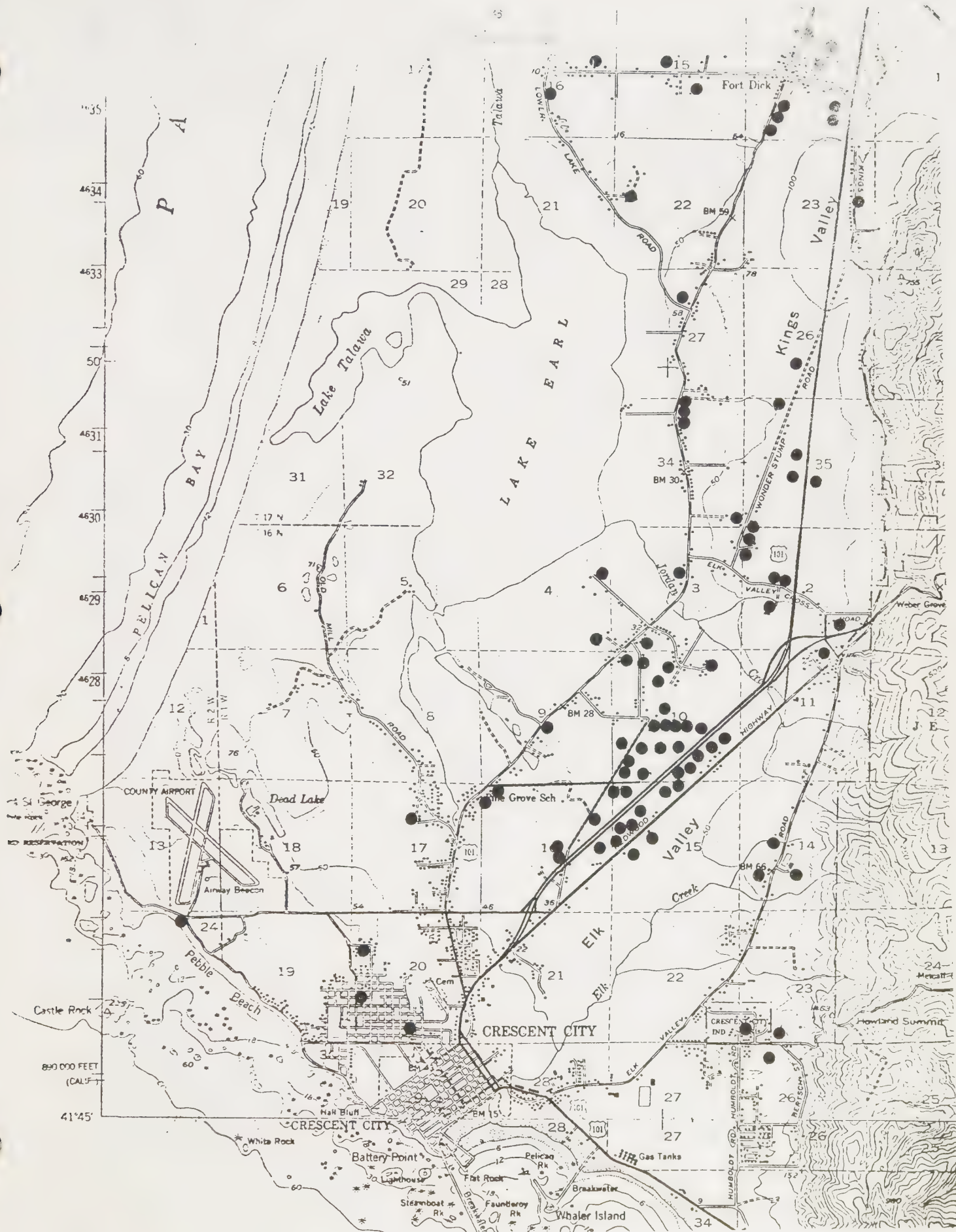
Lot Splits

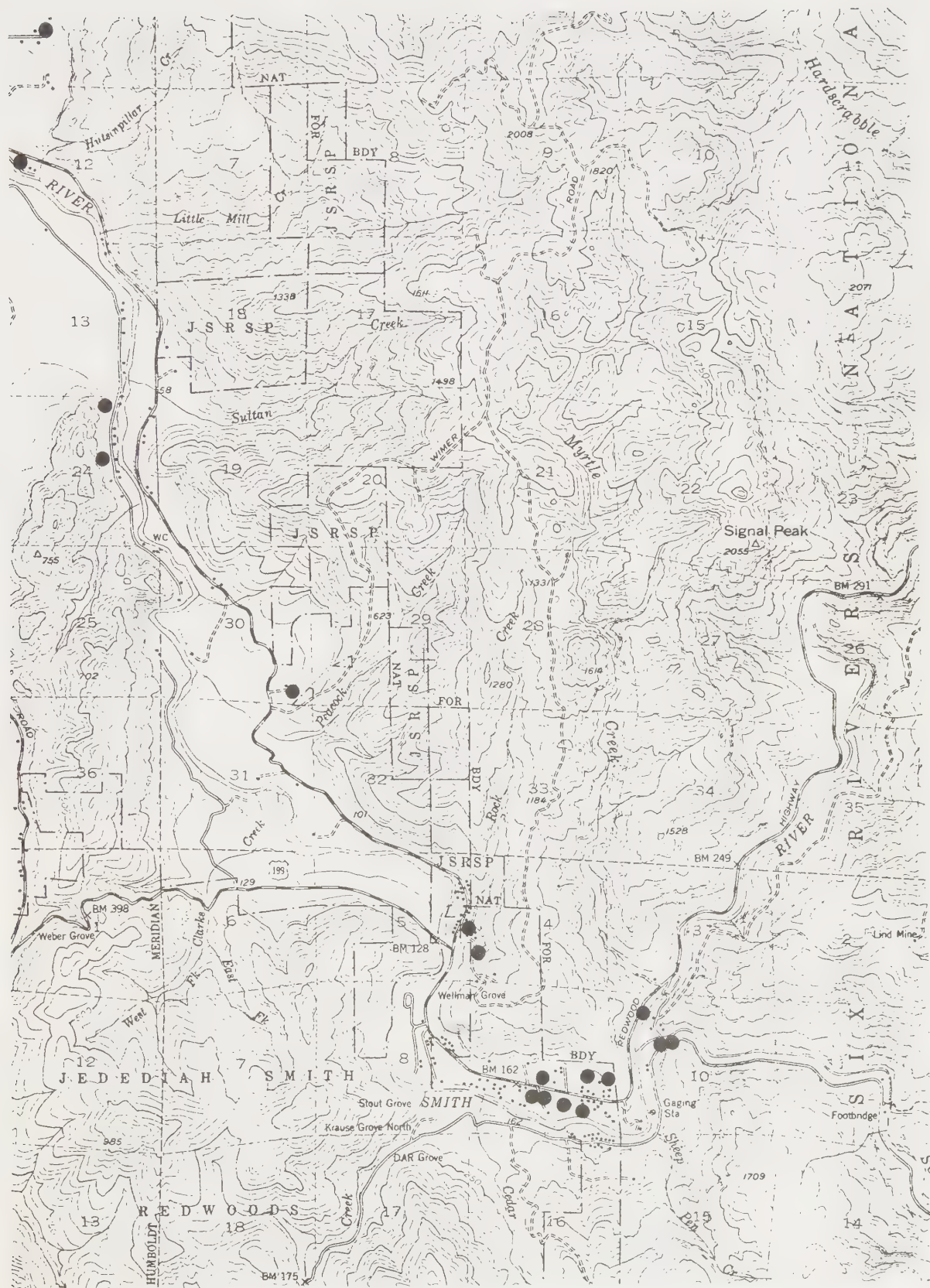
<u>Calendar Year</u>	<u>Approved</u>	<u>Parcels Created</u>
1974	35	92
1975	34	155

Lots splits approved awaiting final parcel map - 35

Number of parcels to be created - 102

These lots are sold as essentially unimproved. Lots sold without improvements place a burden on the buyer to improve the lot to necessary requirements for development. A burden is also placed upon the County to provide services that the taxpayer expects for his residence, himself and his property. The rising number of lot splits





has encouraged the parcelization of marginal land questionably suitable for residential development.

The relationship of lot splits to residential development in Del Norte County is very strong. This relationship can be seen by the comparing of lot splits to the location of new housing starts. (See maps 1, 2, and 3 and pages 11 and 12 of Housing Element.) The creation of new parcels of sizes not suitable for agricultural or timber production uses should be carefully evaluated for the probability of residential development. Lot splits in environmentally sensitive areas should be evaluated as to the size of the parcel, its probably eventual use, and the adequacy of the size of parcel in relationship to providing adequate area for that use while insuring the maintenance of the physical area.

The existence of large areas of unclassified land has allowed the creation of varied lot sizes in rural areas of the County. Appropriate use and the necessary size of the lot for that use have not been examined closely in the approval of new lots created. Parcels have been created which are more appropriate for urban areas than their rural location. Rural uses are virtually eliminated for use by the owner due to the small size of the parcel.

The natural beauty of Del Norte County will continue to attract people from the urban centers of California. As long as this natural beauty is properly maintained, non-county residents will continue to invest their money in property in Del Norte County either for speculation or their retirement or their own private use. The eventual buildout of all existing and to be created lots and parcels will probably never materialize due to the speculative nature of many investors; however it is becoming more and more the responsibility of government to "protect" the consumer from his own errors in judgement, and for the County to be in a position of having to provide expensive public services because of sprawl development. Therefore, in anticipation of this eventual responsibility of local government for the consumer, the following recommendations are made:

1. All zoning districts in the County should be re-examined in relation to County General Plan proposals. New Zoning and rezoning should be judiciously enacted to functionally differentiate urban from non-urban land, with corresponding density limitations allocated in accordance thereof. It should be the function of a zoning or rezoning proposal to project the maximum density of that zoning classification and examine the affected land area's capacity to support that density, including services available or lacking.
2. The Planning Commission should adopt a policy for unclassified areas that allows the creation of lots into parcels of no less than one acre of useable land and states that any lot split resulting in less than one acre of useable land will be subject to review regarding the impact of development of such parcels of land before approval is granted. This review will be based upon an evaluation of available services and facilities, amenities, the physical capacity of the land, use and septic and well capabilities.

3. The County should develop and adopt ordinances for environmentally sensitive areas. These ordinances would give local government control of development decisions for environmentally sensitive areas. These ordinances would serve a twofold purpose: 1) identifying and protecting the quality of environmentally sensitive areas and 2) providing performance guidelines for development in, or adjacent to, these areas for the developer.
4. The County should improve its existing road development policy or create a new policy for "street" improvement in the paper subdivisions of the County. If these areas can meet water quality standards, development will take place. Since the County owns the right-of-ways within these subdivisions, pressure will be placed upon the County to maintain these roads once they are installed, the County should therefore insure that these roads (streets) are up to County standards (paved and of adequate construction and width) prior to acceptance.
5. The County should encourage where possible, in paper subdivisions road abandonment, insuring no parcel becomes land locked and revertment to acreage.
6. The zoning of paper subdivision areas where lot consolidation has the potential due to the ownership pattern of several lots per owner, low density zoning should be enacted to reduce inappropriate densities. The County should monitor proposed State enabling legislation to determine when lot consolidation can be instituted by the County to aggregate lots into lower density patterns.

MOBILE HOMES



Objective

To recognize the continued use of mobile homes as a housing alternative and to establish the basis for the orderly use of mobile homes.

Del Norte County is attractive to owners of mobile homes for a variety of reasons. Among these are:

- 1) The stabilizing population and economic growth of the County has not generated a strong pressure for new jobs, or new homes.
- 2) County residents of relatively low income cannot generate a demand for moderate to high cost housing. As a result, this segment of the County's population finds a better buy in mobile homes, which can provide a reasonably good facility for living.
3. The County is a great tourist magnet. Accordingly, it attracts many families and individuals who travel in campers and trailers. Provision has to be made for these visitors in relation to their interest in recreation facilities and areas throughout the County.
- 4) The improvements in construction and aesthetic appeal have attracted more buyers from middle income groups.

Increasing mobile home ownership in Del Norte County is creating problems for the County and its residents as it has in other communities. The two major problems of concern are locations and taxation.

The County's Trailer Ordinance permits mobile homes to be located anywhere in the County except in R-1 (single family residential districts), R-R (Rural Residential), R1A (Residential Agriculture), C-2 (Commercial) and M and MP (Manufacturing). Trailers are permitted on a minimum lot size of 12,000 square feet. The result is that trailers (Mobile homes) are scattered throughout the County, many on individual lots.

Since the mobile home is considered by the State of California as a vehicle, the mobile home cannot be placed on the tax roll as a structure. As a vehicle, the mobile home owner must license his mobile homes each year. The State Division of Motor Vehicles has developed a formula for the licensing and depreciation of the mobile homes. The following information was supplied by the Department of Motor Vehicles and is part of the Revenue and Taxation Code, Section 1075.2:

1. The mobile homes are divided into various classes depending on the cost of the unit. A licensing fee is assessed to each unit at 2% of the cost and the cost is depreciated over an 18 year period.

2. Trailer coaches 40 feet long and 8 feet wide or less use a different schedule than the larger mobile homes.
3. An \$11.00 fee is added to the licensing fee and is retained by the State of California.
4. The depreciation schedule for trailer coaches over 480 inches in length and 96 inches in width is as follows:

1st year 85%	7th year 30%	13th year 20%
2nd year 70%	8th year 25%	14th year 19%
3rd year 55%	9th year 24%	15th year 18%
4th year 45%	10th year 23%	16th year 17%
5th year 40%	11th year 22%	17th year 16%
6th year 35%	12th year 21%	18th year 15%

19th year and each succeeding year 15% of the original value

From the preceding table for calculation purposes, a mobile home costing \$10,000 would pay a license fee in the first year equal to $85\% \times \$10,000 \times 2\% = \170.00 .

The State distributes this tax revenue back to the County and the affected school district on a 50-50 basis. If a mobile home is located within the City, the State returns revenue on a 1/3 share basis to the County, School District and the City.

No taxes other than those on the land and other improvements (accessory buildings, septic tanks, etc.) are paid for special districts including Junior College, flood zone, cemetery, water, lighting, fire, etc.

To better comprehend the tax difference between a mobile home and a modern conventional home of approximate equal original value, the comparison below is given. In reviewing this comparison one must consider that this is for illustration only and does not take into account many variables.

Comparison of Mobile Home License Fee to Taxes of a Comparable Dwelling Structure

Criteria for Mobile Home

1. 12 x 60 mobile home, 720 square feet.
2. Estimated average cost of mobile home - \$8,500.00
3. No increase in license fee schedule.
4. Taxes -

Land Taxes equal to that of a conventional house.
Additional \$1,000.00 appraised value for utilities,
or $\$1,000.00 \times 25\% = \250.00 assessed x \$10.00 per
\$100.00 = \$25.00 per year.

5. Normal maintenance.

Criteria for Modern Dwelling

1. 720 square feet living space built to Class 6 (D6A)
2. Cost of dwelling unit using D6A schedule with area adjustment. $\$21.83$ per square foot x 720 square feet = $\$15,718.75$.
3. No change in tax rate or no increase in value due to inflation.
4. Normal maintenance.

Comparison

Age	Taxes on Structure	Total License Fee to County	Taxes on Utilities	Total	Difference
New	\$393.00	\$170.00	\$25.00	\$195.00	\$198.00
1 year	393.00	144.00	25.00	169.50	223.50
2 years	393.00	119.00	25.00	144.00	249.00
3 years	393.00	93.50	25.00	118.50	274.50
4 years	393.00	76.50	25.00	101.50	291.50
5 years	393.00	68.00	25.00	93.00	300.00
6 years	393.00	59.50	25.00	84.50	308.50
7 years	393.00	51.00	25.00	76.00	317.00
8 years	393.00	42.50	25.00	67.50	325.50
9 years	393.00	40.80	25.00	65.80	327.20
				Total	\$2814.70

Currently there are over 1165 mobile home units within Del Norte County. These mobile homes represent a substantial current and projected reduction of total taxes generated to the County. (The actual reduction is higher than that indicated in the comparison because a conventional home will actually increase in value. There is a tax reduction only in the sense that a conventional structure would pay more taxes. The issue is revenues generated in relation to cost of services provided, or do the fees paid by mobile home owners pay for the cost of providing services to mobile homes?)

Generally in the taxation issue, the following findings have been accepted in regards to mobile homes:

1. Mobile homes and travel trailers are taxed at a different rate than other property. The vehicle license fee rate of 2% is less than the estimated equivalent statewide property tax rate.
2. The mobile home/travel trailer tax rate is statutorily fixed while local property tax rates are subject to annual change and historically have increased each year.
3. The depreciated market value of mobile homes to which the vehicle license fee rate is applied is less than the actual market value of mobile homes. This is because mobile homes are valued on the basis of a statutory depreciation schedule which is not consistent with existing market values.

4. Revenue from the vehicle license fee are not allocated in the same manner as are revenues from the local property tax. This difference in procedure results in a lower allocation to school districts and no allocation to community colleges and special districts.
5. Mobile home and travel trailer owners who use mobile homes or travel trailers as their principal residence can receive a homeowner's, senior citizen's, or veteran's exemption even though they do not pay local property taxes on the mobile home or travel trailer.
6. It is administratively feasible to transfer the assessment and taxation of mobile homes to the counties; however, the transfer of the assessment and taxation of travel trailers is not feasible because of their mobility.
7. Mobile homes and travel trailers held in the inventory of dealers and manufactureres are not subject to local property taxation or to the vehicle license fee.

Studies conducted in urban and rural areas indicate that mobile homes located within mobile home parks return twice as much revenue per acre as mobile homes on individual lots and can generate more tax revenue than conventional single family units of 3.4 to 4 per acre. It should also be noted that mobile home parks usually provide water, sewer, recreation areas, lighting and streets within the park, thereby reducing the overall cost to the County.

The main problem between mobile homes and conventional structure homes is that the in-lieu tax is fixed and cannot rise when services are increased within a taxing district. In addition, as inflation persists and the cost of government services increases the tax rate, tax differences between the mobile home owner and the conventional home owner widen more.

Other problems with the current tax structure of mobile homes are that since the in-lieu tax is placed in the General Fund; mobile home owners pay more than their share of taxes to the County General Fund, and conventional home-owners bear a greater burden in paying for services which do not receive monies from the General Fund. Also, sales taxes on mobile homes purchased in one county do not benefit another county in which the mobile home is placed.

Since the State has preempted the field of mobile home taxation, the County can only recommend policy changes to the State or use its police powers to rectify the problem. For example, if mobile homes could be consolidated so as to increase the tax base within a taxing district, the problem would be closer to a solution. (The effect a consolidation would have on an area wide district, i.e. Unified School District, is not known. Before any consolidation is considered, these effects should be investigated.)

The County allows trailers under permit in all zoning classifications except R-1, R-R, R1A, C-2, M and MP. Mobile homes are not allowed on a property owners parcel unless it is to be used by a member of the immediate family or caretaker or has a temporary use permit. This policy has resulted in the establishment of many one unit or less than 5 space mobile home "parks" of minimal design or facilities. (See Table listing mobile home parks of the County. Those with asterisks are under 5 spaces or began as less than 5 space mobile home parks.

The preferences of many County residents for living in mobile home parks have a variety of good reasons behind them. State laws allow the rental or lease of mobile homes for habitation only in mobile home parks. Anyone wishing to rent a mobile home and thereby avoid property maintenance can only do so in a mobile home park. Small lots and sites also minimize maintenance activities. Also attractive is the convenience of nearby recreation and laundry facilities. Some people, especially the retired and elderly, like the combination of ground-level single-family living and the nearness of compatible neighbors.

Separate from the issue as to how to achieve a more equitable taxation procedure for the conventional and mobile home owner, the following conclusions can be determined for Del Norte County and its mobile home inventory:

1. As mobile homes age, less revenues will come into the County coffers.
2. With property tax relief programs, owners of individual sites can reach a situation where through the use of exemptions in property tax they could pay no property taxes to the County.
3. In the future, as mobile homes become more functionally and physically obsolete, it is unclear how code enforcement, rehabilitation programs can be implemented and structured to improve a declining older mobile housing stock.
4. Presently, mobile homes are occupied by small family sizes. If in the future family sizes increase, and based on the existing taxation process, community service costs could rise to inequitable levels.
5. Because of increasing costs in the construction of conventional housing, mobile home living will continue its popularity as a housing life style.
6. The present policy of establishing mobile home parks has the potential of expanding those parks in non-appropriate areas with inadequate facilities and deficient design.

It should be recognized that the mobile home is, and will continue to be, an increasing part of the housing for Del Norte County. The County should prepare for mobile home housing and its potential effects

by re-evaluating present policies and regulations which pertain to mobile homes. The following recommendations should be considered:

Policies

1. The County's Trailer Ordinance should be revised, updated and retitled, "Mobile Homes and Mobile Home Parks Ordinance". Within this Ordinance a distinction should be made between mobile homes and travel trailers. The mobile home should be considered a permanent use. (Guidelines for Mobile Home Parks are included in this element.)
2. Modular or factory built conventional homes should be considered as conventional housing and therefore be subject to the regulations and privileges of conventional housing.
3. Mobile homes should not be mixed indiscriminately within conventional single family residential, commercial or industrial areas. Since mobile homes are residential uses, special residential areas in addition to mobile home parks should be planned.
4. Criteria should be developed to locate mobile homes within areas of conventional housing. This criteria should be based upon the same standards maintained for conventional housing, with the added requirement that the "vehicle" character of the mobile home conform to the character of the area, e.g., skirting, landscaping, lowered pads, awnings, etc. Guidelines for the development and location of mobile home subdivisions will be developed.
5. The County should re-evaluate and petition the State to change the current policy of requiring the use of a mobile home be limited to the property owner, an agent of the property owner or a member of his immediate family. A recommended policy would be that rental mobile homes would be limited to one unit per lot and not to exceed 3.5 per acre and would be subject to other provisions of the Mobile Home and Mobile Home Parks Ordinance. If either of these densities were exceeded, the owner would be required to reduce his use to meet this requirement or establish a Mobile Home Park subject to the County guidelines for Mobile Home Parks.
6. Use of the "T" overlay should continue, however the County should limit its use recognizing the reduction of tax generating potential this overlay creates and the additional burden of taxes it may place upon conventional homeowners.
7. A more equitable method of distribution of in-lieu tax funds should be examined; preferably one which distributes funds in line with costs of services provided mobile home owners.

8. The County should request a review of the State Depreciation Schedules now used for mobile homes. (Recommendation to the State.)
9. The County should join in efforts to seek a more equitable basis for taxing mobile homes.
10. The County should examine the relationship of cost of services provided to taxes generated to the County by mobile homes and establish policies which reflect the findings.
11. If the concept of depreciation cannot be changed, a different fee in relation to market value should be explored. The 2% of market value fee paid to the State by mobile home owners might be made more flexible, in the form of a sliding scale, to more accurately reflect the cost of services a mobile home requires. (Recommendation to the State.)

Guidelines for Mobile Home Parks

The following section is reprinted here for study and possible application by the Del Norte County Planning Commission to the problem under discussion.

1. Location

a. Community Facilities

- 1) By definition and use, a mobile home park is basically a residential subdivision and should be located conveniently to schools, churches, shopping facilities, and other appropriate community facilities.

b. Zoning

- 1) The site should preferably be located adjacent to a residential zone.
- 2) If the site is zoned for commercial or industrial uses, it should not be subject to adverse influences. Location of the park might be a buffer between residential and light industrial or commercial but never heavy industrial. Buffer locations should be carefully reviewed. Placement of mobile home parks in undesirable locations can result in high turn-over of residents, reduced income for the owner and poor maintenance. Good location can result in minimal resident turn-over, adequate income for the owner and a more attractive park in its appearance.
- 3) If the site is unzoned, caution should be taken that the mobile home park will not be subject to adverse influences nor in itself adversely affect adjacent neighborhoods. Moreover, unzoned locations (open zoning) often create problems because undesirable business may be established.
- 4) All sites must have the appropriate approval of local county or state health authorities.

c. Access

- 1) Access to the site should be provided by means of an abutting improved public street or road.
- 2) Private streets within the park must be suitable for all traffic needs and serve each tenant's space. They should be owned by the developer for control of their use.

2. Site Development

a. Utilities

- 1) Underground utility systems for electricity, telephone, natural or propane gas and fuel oil, if used, should be required.
- 2) Each space must be served by central water and sewer systems. A public system is preferred. However, if a community or central utility system is to be used, it must meet all state and local requirements.

b. Site Drainage

- 1) The site must have adequate gradient for surface drainage.
- 2) Each lot must be graded so that surface water from mobile home park stands, patios, service buildings, etc., will drain away from the improvements to prevent flooding and erosion.
- 3) Approved and adequate storm sewer system must be provided to carry off surface water from the park.

c. Topography and Landscaping

- 1) Sites should be relatively level to accommodate movements of long and heavy mobile homes within the park.
- 2) Excessive grades will require lower densities and higher costs.
- 3) Existing top soil, if suitable for future use, should be stripped so that it can be stored and used in landscaping. Existing trees should be retained. Their placement should not interfere with the placement of the mobile homes.
- 4) Above-ground and below-grade rock of any extent will be costly to develop and landscape. Therefore, soundings for soil percolation as well as rock and other detrimental subsurfaces should be made by a competent engineer.

3. Improvements

a. Park Layout*

- 1) Professional planning should be obtained to achieve a residence-like atmosphere at a reasonable cost.
- 2) Park layouts with curvilinear street and cul-de-sacs, similar to other residential subdivisions, are preferred because they permit advantageous use of grade differences, locations of trees and other natural site features.
- 3) One main entrance allows more efficient control of the park by management.
- 4) If the park caters to different groups such as retirees, young marrieds with children, etc., different sections of the park should be assigned to each group, with play areas and other mobile home park facilities appropriately located.
- 5) If the developer is a dealer in mobile homes, he should be discouraged from placing his retail sales lot on the front of the mobile home park.

b. Lot Area

- 1) A minimum lot area of not less than 3,600 square feet or 40 feet x 90 feet is recommended for each mobile home space. Sites designed for double wides or larger units shall be of an average width of 30 feet plus the width of the mobile home.
- 2) Including streets, recreational areas and service facilities, an overall density of no more than eight lots per acre is recommended.
- 3) Each home should be set back at least 10 feet from the street and the rear lot line and at least 20 feet from neighboring mobile homes at the side and at least 10 feet at the rear.
- 4) All mobile homes should be located at least 25 feet from any public street or highway and at least 15 feet from other mobile home park boundarylines.

c. Mobile Home Stand

- 1) Each stand should be surfaced with gravel or crushed stone or paved to provide a stable base for the mobile home and to control weeds.
- 2) The stand should provide an adequate foundation for the placement of tie-down anchors to prevent homes from lifting up, sliding, rotating or overturning.

* Recommended number of spaces: not to exceed 250. A minimum number of spaces and acreage needs to be developed.

d. Patio

- 1) For each stand, a paved patio area of at least 180 square feet with a minimum width of nine feet, must be provided.
- 2) The patio must be convenient to the entry of the mobile home and appropriately related to the open area of the lot.

e. Streets

- 1) Streets on the property should be retained as private streets.
- 2) Streets must be provided for adequate access to each mobile home stand and other important facilities on the property.
- 3) Street systems should provide convenient circulation by means of properly located collector streets which feed traffic to the minor streets.
- 4) Wide, paved, curved streets of adequate width to serve two-way traffic with designated walks on at least one side and efficient and attractive street lighting are recommended.
- 5) Recommended minimum pavement widths:
 - a) All entrance streets and other collector streets with;

guest parking both sides - 40 ft. minimum
guest parking on one side - 32 ft. minimum
 - b) Collector street with no parking - 25 ft. minimum
 - c) Minor or cul-de-sac street with no parking - 25 feet minimum.

f. Parking Space

- 1) Off-street parking should be provided for 1-1/2 cars for each stand. Facilities for storage of Recreational vehicles, boats or campers should be located in a secure area, appropriately screened.

g. Walks

- 1) Paved walks should be provided from all streets to each mobile home stand, patio and parking areas. Walks that would not be widely used should be avoided because of the expense involved in constructing such amenities.
- 2) Walks on at least one side of major streets are recommended.

h. Management Offices and Service Buildings

- 1) For small and medium sized parks, the grouping of offices, supply, storage, laundry and toilet facilities in a single building is advisable for park operations and economy. The size of the buildings should be closely correlated to the overall expected occupancy of the park. It is often to the advantage of the developer in a medium or small sized park to have only one building for office and laundry facilities. Necessity of a large storage building is questionable if tenants are provided individual storage facilities on each lot.
- 2) For larger parks, buildings should be strategically located most easily to serve the function for which they were designed.
- 3) Management offices should be located near the entrance for operational efficiency and ingress and egress control.
- 4) All buildings should have both automobile and pedestrian access.

i. Recreational Facilities

- 1) Playground areas in the family section should be convenient to all lots without excessive traffic hazards.
- 2) In larger parks, noisier recreational areas should be as far removed as possible to lessen interference with other homes in the park and to minimize view obstructions.
- 3) Typical amenities might include a clubhouse, swimming pool, golf course (par three), tennis and shuffleboard courts.

j. Laundry (Drying Area Not Suggested)

- 1) A central laundry building should be provided. It should be decorative and landscaped in keeping with the overall appearance of the park.

k. Fences, Walks and Miscellaneous Improvements

- 1) Border fences around play areas, laundry areas and other public areas should be of decorative material and avoid the institutional look of chain link fencing.
- 2) Individual lot fencing should be restricted in order to avoid the "closed in" feeling.
- 3) Landscaping should be planned for overall effect without monotony. Landscaping by tenants should be made only with park owner's approval.

- 4) Lawns should be provided for each individual lot.
- 5) One single television antenna for community service.
- 6) Uniform and attractive mailbox facilities with street number should be provided for each tenant.
- 7) Car wash facilities and boat and trailer storage areas should be located at the rear or a corner of the park so that it will minimize the effect on adjoining sites.

4. Mobile Home Park Regulations

Park regulations must be formulated to control overall operation and appearance, and to preserve the functional utility of the park. The following are among the most important items to be covered by the park regulations:

- A. Control additions, alterations, canopies, awnings, and porches of all homes.
- B. Control landscaping of lot.
- C. Require homes to be skirted.
- D. Regulate tenant storage areas to avoid eyesores to the park.
- E. Provide for uniform garbage and trash collection system, preferably a public system.

COUNTY LAND USE



The Land Use Element is the key element which designates the general distribution, location and extent of the uses of land for residences, businesses, industry, open space, including agriculture, natural resources, recreation and enjoyment of natural beauty and other public and private uses of land. The general pattern of land uses outlined on the land use maps are a result of examining natural physical factors, land consumption, social factors, economic trends, existing and historical land use patterns and the policies and proposals of the other elements of the General Plan.

The General Plan Maps contain six major categories of land use designations and each indicates appropriate areas for their development. The general pattern of land uses outlined on these maps should be the basis on which zoning districts are established, although zoning ordinances contain more specific development requirements and standards than the General Plan designations. A chart, entitled "Del Norte County General Plan Designations", indicating the zoning districts which would be compatible with the various General Plan land use categories is illustrated on page 4 of this element. The land use categories on the General Plan Maps are as follows:

Residential

Applied to urban or urbanizing areas of the County of a suburban nature and to provide for the orderly development of urban residential uses.

Residential - up to six dwelling units per acre
including SFD and Duplexes.

Multi-family Residential - high density urban use
with more than six units per acre.

Commercial

Purposes for the two general types of commercial use areas are listed below:

Commercial - business districts and general commercial activities.

Commercial Recreational - public and private parks, recreational developments, campgrounds, recreational vehicle parks, and other commercial uses of a seasonal nature.

Industrial

To be applied to land areas best suited for industrial uses. Development of light-industrial parks is proposed for the Washington Boulevard and Inyo and the Elk Valley Road and Highway 101 industrial areas.

Rural

This designation is designed for the orderly development of rural homesites and to encourage a suitable environment of a variety of family activity for those who desire rural

residential land.

High Density Rural - up to 1 dwelling unit per acre.

Medium Density Rural - up to 1 dwelling unit per two acres.

Low Density Rural - up to 1 dwelling unit per three to five acres.

Community Development

This designation is applicable to parcels of land which are suitable for and sufficient size to contain a planned development comprised of one or more land uses which are compatible and are integrated to the districts adjacent to the parcel, and to effect a design control over the development.

Conservation and Open Space

Extensive areas of the County are included in this group of designations in which good conservation practices are imperative. These designations identify and geographically locate the natural resources, public and privately owned, of the County for their conservation, development and utilization.

Grazing - applied to pastoral agricultural land and also applied to environmentally sensitive areas which are suited pastoral agriculture such as Point St. George, Hunter and High Prairie Creeks and Requa Hill.

Agricultural - areas of non-prime soils located in or adjacent to prime soils as identified below and historically used and appropriately sited agricultural parcel of land which may be located within or adjacent to environmentally sensitive areas and are compatible with these areas.

Prime Agricultural - applied to areas of prime agricultural soils (Class I soils and/or 80 and above on the Storie Index) of 20 acres or more of contiguous ownership of prime soils to support agricultural crop production, which areas are proposed to be conserved to encourage continued agricultural production and prevent the intrusion of incompatible uses.

Forestry - applied to areas which have essential characteristics for timber production. Development for other than timber production could be determined to be acceptable for forestry designated areas which are not contiguous to other large parcels of forestry land. Development for other than timber production on acres characterized by 30% slope should be severely restricted, and adequate review be carried out to ensure that seismic and geologic hazards are avoided or mitigated and the forestry nature of the area is conserved.

Parks - City, County and State Parks.

National Forest Land - private and public land within the National Forest Boundary.

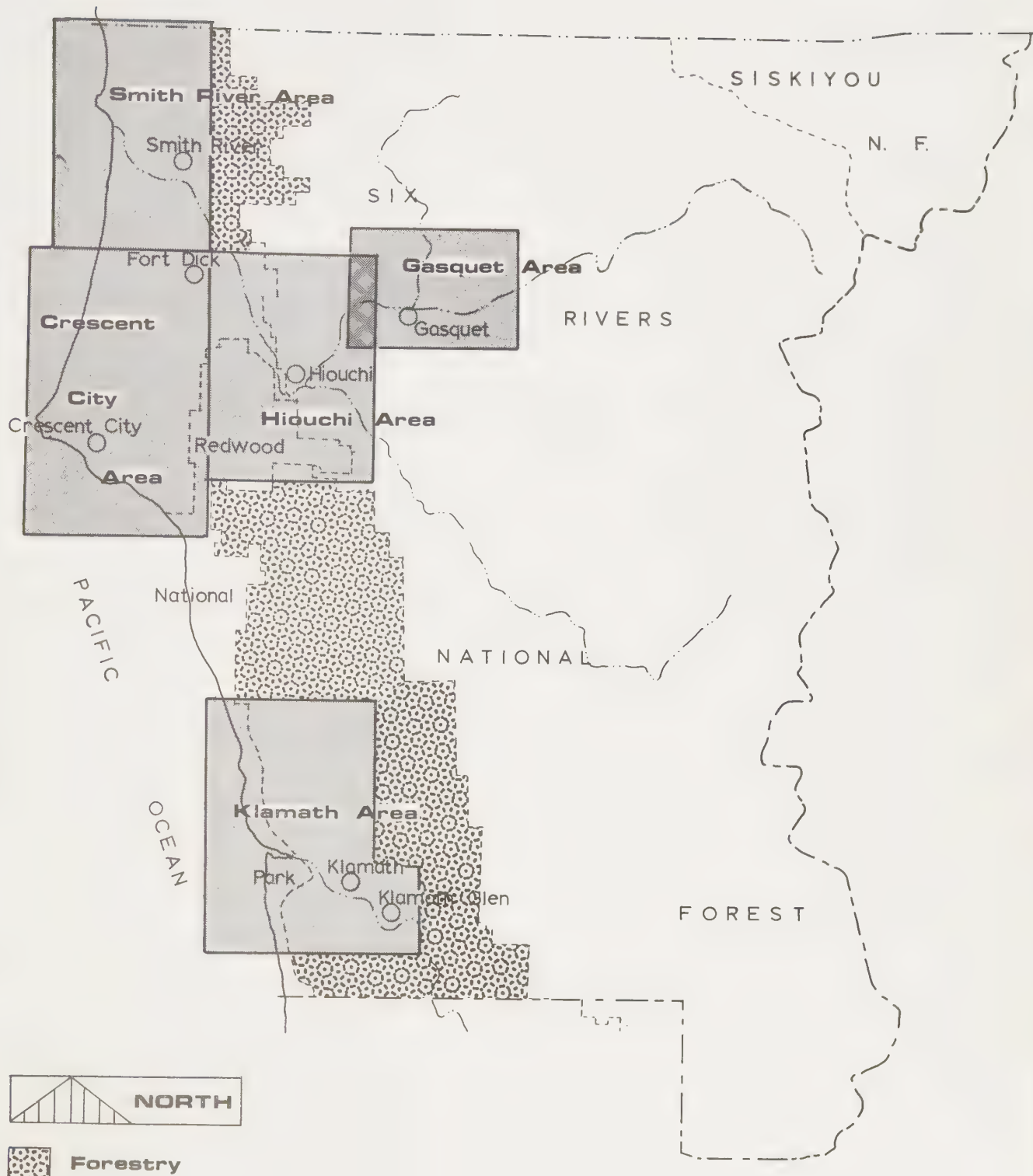
Dune Land - these include sand dunes, some of which are wet sand areas containing a surface or near surface water table which should be considered prior to any proposed development. These areas are of marginal value for grazing and other agricultural uses.

Beaches and Off-Shore Rocks - recognized as a significant recreational, visual and conservation resource. As identified, these areas should remain in the underdeveloped state.

Riparian Vegetation - applied to areas located on the back of a natural watercourse, marsh, or lake which provide streambank protection, scenic beauty and/or wildlife habitat. Also included are areas of low topography and poor drainage. Excluding existing agricultural activities, these areas should remain in their underdeveloped state (the Lake Earl Marsh area is identified separately due to its overall significance).

Recreational Open Space - applied to environmentally sensitive areas including localized upland watershed areas, flood plains, stream overflow bars, and areas of steep slopes. Selected development could be allowed if the existing and potential environmental factors were mitigated and the open space values were adequately maintained.

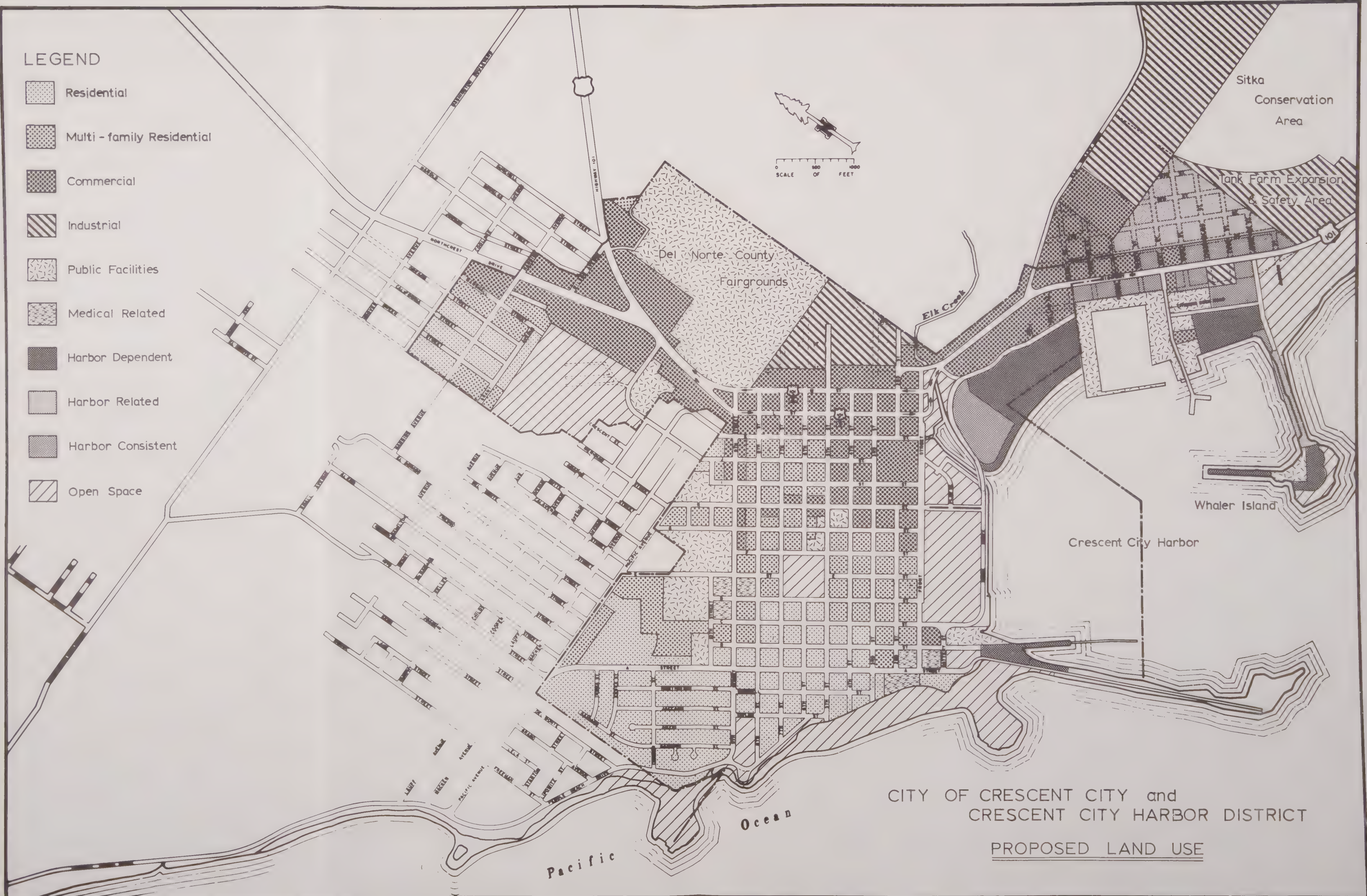
Open Space - applied to limited capability land of which development should not be considered.



PROPOSED LAND USE

KEY MAP

	Residential
	Multi - family Residential
	Commercial
	Industrial
	Public Facilities
	Medical Related
	Harbor Dependent
	Harbor Related
	Harbor Consistent
	Open Space



LEGEND

- Residential**
- Residential 0-5 D.U./acre
 - Multi-family Residential 6 or more D.U./acre
- Commercial**
- Commercial
 - Commercial - Recreational
- Industrial**
- Industrial
- Rural**
- High Density Rural 0-1 D.U./acre
 - Medium Density Rural 0-1 D.U./2 acres
 - Low Density Rural 0-1 D.U./3-5 acres
 - Grazing
 - Agricultural
 - Prime Agricultural Land
 - Forestry
- Community Development**
- Community Development
- Conservation and Open Space**
- City and County Parks
 - Schools
 - Cemeteries
 - Dune Land
 - Beaches and Offshore Rocks
 - Riparian Vegetation
 - Open Space



PROPOSED LAND USE
Crescent City Area



LEGEND

Residential



Residential 0-6 D.U./acre



Multi-family Residential 6 or more D.U./acre

Commercial



Commercial



Commercial - Recreational

Industrial



Industrial

Rural



High Density Rural 0-1 D.U./acre



Medium Density Rural 0-1 D.U./2 acres



Low Density Rural 0-1 D.U./3-5 acres



Grazing



Agricultural



Prime Agricultural Land



Forestry

Community Development



Community Development

Conservation and Open Space



City and County Parks



Schools



Cemeteries



Dune Land



Beaches and Offshore Rocks



Riparian Vegetation

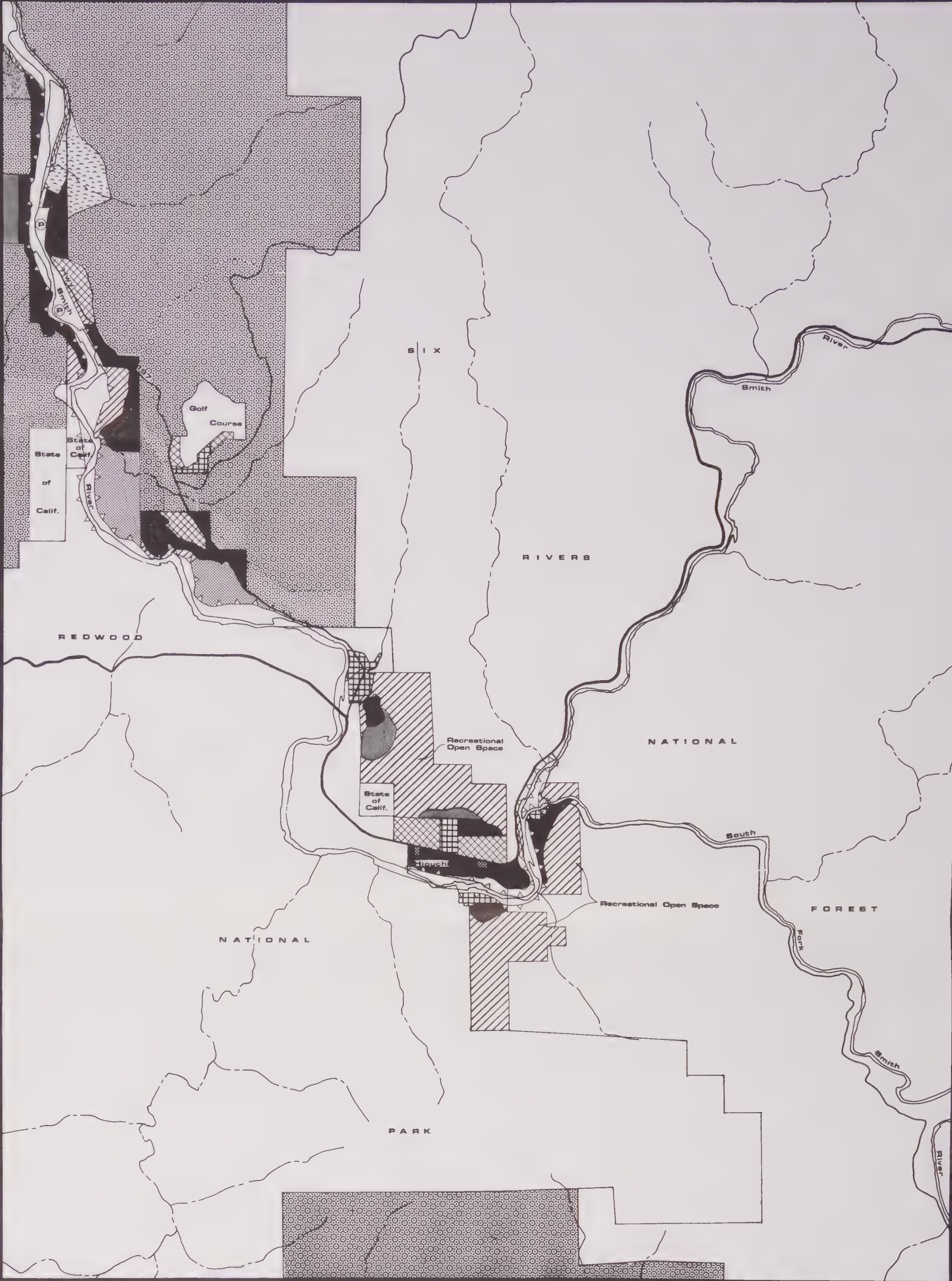


Open Space



LEGEND

- Residential**
- Residential 0-5 D.U./acre
 - Multi-family Residential 6 or more D.U./acre
- Commercial**
- Commercial
 - Commercial - Recreational
- Industrial**
- Industrial
- Rural**
- High Density Rural 0-1 D.U./acre
 - Medium Density Rural 0-1 D.U./2 acres
 - Low Density Rural 0-1 D.U./3-5 acres
 - Grazing
 - Agricultural
 - Prime Agricultural Land
 - Forestry
- Community Development**
- Community Development
- Conservation and Open Space**
- City and County Parks
 - Schools
 - Cemeteries
 - Dune Land
 - Beaches and Offshore Rocks
 - Riparian Vegetation
 - Open Space

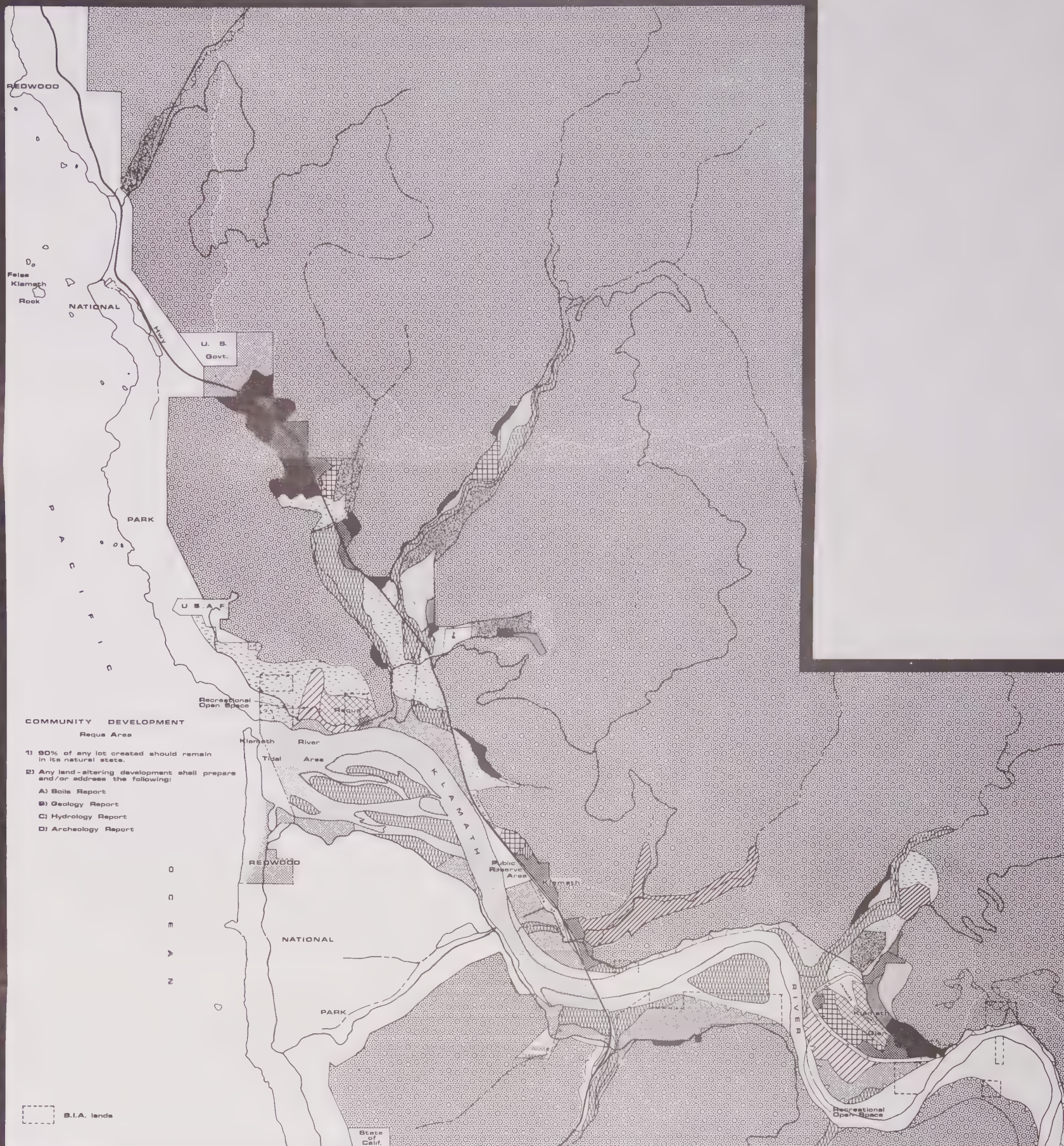


PROPOSED LAND USE
Hiouchi Area



LEGEND

- Residential**
- Residential 0-5 D.U./acre
 - Multi-family Residential 6 or more D.U./acre
- Commercial**
- Commercial
 - Commercial - Recreational
- Industrial**
- Industrial
- Rural**
- High Density Rural 0-1 D.U./acre
 - Medium Density Rural 0-1 D.U./2 acres
 - Low Density Rural 0-1 D.U./3-5 acres
 - Grazing
 - Agricultural
 - Prime Agricultural Land
 - Forestry
- Community Development**
- Community Development
- Conservation and Open Space**
- City and County Parks
 - Schools
 - Cemeteries
 - Dune Land
 - Beaches and Offshore Rocks
 - Riparian Vegetation
 - Open Space



PROPOSED LAND USE

Klamath Area



LEGEND

- Residential**
- Residential 0-6 D.U./acre
 - Multi-family Residential 8 or more D.U./acre
- Commercial**
- Commercial
 - Commercial - Recreational
- Industrial**
- Industrial
- Rural**
- High Density Rural 0-1 D.U./acre
 - Medium Density Rural 0-1 D.U./2 acres
 - Low Density Rural 0-1 D.U./3-5 acres
 - Grazing
 - Agricultural
 - Prime Agricultural Land
 - Forestry
- Community Development**
- Community Development
- Conservation and Open Space**
- City and County Parks
 - Schools
 - Cemeteries
 - Dune Land
 - Beaches and Offshore Rocks
 - Riparian Vegetation
 - Open Space

Western Slope Area
Slopes over 30%
High erosion hazard and
severe limitations to
septic leach fields

Dune Movement Area
Future land-altering
development should be
limited to these areas

Hunter Rock

Prince Island

Smith
River
Tidal
Area

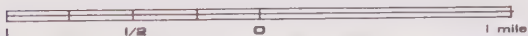
Smith
River

* Development north of Hwy 101 will create a
pedestrian traffic hazard in this area.

PROPOSED LAND USE

Smith River Area

Scale 1:24000



CRESCENT CITY



CRESCENT CITY

Introduction

The uniqueness of Crescent City is its blend of community and urban qualities within an attractive physical setting. The prevailing image of Crescent City is of a relatively small, comfortable and established community focused on the ocean, situated between broad beaches, the harbor, coastal bluffs and to the east, scattered forests and rural residences. Crescent City's rural image is generated by its close relationship to rural Del Norte County, the relatively small comprehensible scale of the town, and the physical intergration of its natural elements into the fabric of the town.

Crescent City's urban image is represented by the concentration of available commercial services in the County, within and adjacent to Crescent City. The variety of housing types, commercial activities and the centralization of governmental offices and services within Crescent City add to this urban image.

Description

Crescent City is located on the Pacific shoreline of Del Norte County equally distant from the Oregon State Border and the Humboldt County line. Named because it lays beside a bay which was in the form of a semi-circle, Crescent City was officially established in 1853 and incorporated in 1854 as the 13th City in the State of California.

The City of Crescent City occupies approximately 900 acres, or 1.4 square miles. Crescent City is the County Seat and the only incorporated City in Del Norte County. The City and its surrounding area is the most urbanized part of the County and provides a higher level of community facilities, public services and commercial activity than is obtainable anywhere else in the County. The City's population for July 1975, is estimated to be 2,725. The City and its surrounding area contain 2/3 of the County's total population.

Land Use

During February of 1853, Crescent City was surveyed utilizing a tight gridiron system for placement of streets. This system of streets has at its extremities the following locational attractors:

- A) East, Highway 101 and 199.
- B) West, the bluffs of the ocean.
- C) North, a major through street
- D) South, the harbor.

These attractors for various activities have focused development along the intersections of the routes which connect them. The result is a scattered form of development with many areas of vacant land.

Residential uses are focused in the western portion of the City, adjacent to and along the coastal bluff area. The gross density for the City is approximately three persons per acre, however in considering only the residential area the gross density is 19 persons per acre.

Commercial activity centers along Highway 101 (L and M Streets) and along Front and Third Streets. Activities within this area cater to the needs of local residents while also providing services to the traveling tourist.

Industrial activities are limited, with some scattered within the City while the major activities are located adjacent to Highway 101.

Central Business District

Downtown Crescent City is characterized by its openness, a low intensity of land utilization, and a scattering of mixed commercial uses. There is no visual or physical contact within the Harbor, with the exception of "H" Street, "L" Street and "M" Street. The major factors in the under-utilization of land in the central business district have been the growth of the Crescent City Shopping Center (located within the northeastern portion of the City) and an economic slump in the County.

Much of downtown Crescent City was rebuilt after the disastrous tsunami of 1964. Construction since 1964 has included new commercial building, an attractive pedestrian mall and improved parking facilities. The City of Crescent City Redevelopment Agency can be credited for the speed and efficiency with which the above were completed.

The importance of the downtown area and the Crescent City Shopping Center to the overall economy of Del Norte County is best typified by the fact that over 60% of all taxable sales in Del Norte occur within the city limits of Crescent City.

City Utilities

The major water supplier in Del Norte County is the City of Crescent City, which not only supplies water for the City, but also for outlying areas which lie either adjacent to the City's transmission line or to the City limits.

The existing water system serves over 1,720 current connections; 890 of these connections being inside the City limits and 830 outside. The City annually diverts over 37 million gallons of water from a ranney well situated on the gravel bars of the Smith River. Of this total, approximately 26 million gallons are sold to users with 1/2 of this sold water going to city users and 1/2 to outside city users.

The City of Crescent City is one of four service areas with municipal type sewage facilities. The City service area accounts for more than 95% of the people being served by these facilities. In addition to serving the citizens of Crescent City, the City

accepts and treats sewage from the line extending to Del Norte High School and also the facilities at Crescent City Harbor.

(Additional information on the City's and other districts water and sewage facilities can be reviewed in the "Del Norte County Water Supply and Wastewater Disposal Comprehensive Plan 1972-1992".)

Circulation

Refer to Crescent City section within Circulation Element.

Crescent City Harbor

Refer to Harbor section within General Plan.

Housing

Refer to Crescent City section within the Housing Element.

Noise

Refer to Noise element within the General Plan.

Seismic Safety and Safety

Refer to Crescent City section with the Seismic Safety and Safety Element.

Goal for City Development

Crescent City should pursue a policy of accommodating growth compatible with local, social, economic and environmental objectives and to encourage and guide this growth within the jurisdiction of the City. Emphasis should be placed on the locating of appropriate activities with similar land use activity areas. Encouraging the overall economic and social growth of the City while maintaining its position of importance to the County and improving its overall aesthetic appeal should be the basic theme to the City's development.

Policy

To accomplish the above goals, the following policies should be considered by the City of Crescent City:

Growth and Development

- P-1 The City should review and adopt appropriate policies within the other elements of the Del Norte County General Plan. Specifically those which relate to the City as in the Seismic Safety and Safety, Circulation, and Harbor Elements and those within the remaining elements which will provide a planning basis for the City. (For example: Noise, Conservation-Open Space, Recreation, and Scenic Highways).

- P-2 The City should not actively encourage annexation to the City until such time as the existing vacant properties within the City have been developed. In addition, the City should undertake programs and implementation policies which will encourage new development to occur on existing vacant properties located in the City.
- P-3 The strongest tool the City possesses to manage growth is its utilities. Therefore, the City should not jeopardize its own viability or ability to manage growth in and around the City by overcommitting the capacity of its systems outside of the City limits. However, the City should expand its utility systems in order to strengthen its ability to manage growth, by use of these systems.
- P-4 The City and County should co-operate closely in the development of the area surrounding the City and should allow for appropriate uses contiguous to the City. New urban development should be located in existing urbanized areas to achieve economics in the provision of public services and facilities.

Community Design and Appearance

- P-5 The remaining older structures which serve as a physical reminder of the City's historical past should be preserved to the greatest degree possible. Priority should be given to reserving those structures of architectural or historical significance.
- P-6 The City should become actively engaged in a concentrated Code Enforcement program to encourage the improvement or removal of dilapidated buildings throughout the City. This is particularly important in the central business district and the residential neighborhoods of the City.
- P-7 Conversion of older structures from single-family residential to other uses (such as commercial or multi-family residential) should be selectively allowed if the intrinsic character and outward appearance of the structure is not altered. Demolition of these structures should be very selective.
- P-8 The City's major highway entrances should be developed as scenic corridors through the use of an architectural design them, removal of overhead utilities, landscaping and similar measures to improve the appearance of the approaches to the City.
- P-9 All new development in the Crescent City area should be of quality design and provide an adequate level of amenities.

Economic Environment

- P-10 The downtown business area should continue to function as the main activity center of the City. Maximum commercial use should be made of the sites facing the pedestrian mall. Commercial highway service enterprises should be allowed along Highway 101.
- P-11 High density residential development near the Central Business District and the shopping center should be encouraged to provide a further source of support for commercial activity and to reduce local dependency upon the automobile.
- P-12 Selected new industry which will provide employment for local area residents and reduce the cyclical unemployment effects of the lumber and tourist industries should be encouraged to locate in the Crescent City area.
- P-13 The development of a well designed industrial park area should be encouraged by the City and County in order to attract light industrial development to the area. Strong consideration should be given to the airport area (under flight approach pattern) and the Harbor and Elk Valley Road area.
- P-14 The City should encourage the concentration of medical services adjacent to Seaside Hospital and urge the construction of a medical clinic in that vicinity.
- P-15 The City should encourage placement of a motor inn near the Cultural and Convention Center.
- P-16 Of the commercial activities, neighborhood commercial, highway commercial and heavy commercial uses should be encouraged to locate outside of the Central Business district (CBD).
- P-17 The City should reduce the amount of land zoned for residential-professional uses and encourage the placement of most business and professional offices to locate adjacent to or within the CBD, and to act as a transition between the CBD and residential areas.
- P-18 The City and County should co-operate in eliminating defunct or abandoned structures on industrial land which pose a visual blight and physical hazard.
- P-19 The City, County and Harbor District should continue to work toward common goals in guiding the future development of the City of Crescent City and County of Del Norte.

Plan Map Designations

The General Plan Map for the City of Crescent City is combined with the Plan map for the Crescent City Harbor District. The Plan map contains ten land use designations for the City and Harbor area. The following is a summary of the designations:

Residential - Up to six units per acre, would include the present R-1, R-1B Zones and would allow R-2 zoning as a transition to high density zoning.

Multiple Family - Over six units per acre, would allow R-2 zoning as a transition to residential areas.

Commercial - Allows the full range of commercial activities subject to the following recommendations:

1. No heavy commercial uses should be allowed in the Central Business District.
2. Highway oriented services should be located along Highway 101.
3. Heavy commercial uses should be placed in areas that would not significantly detract from the aesthetic values of the surrounding area.
4. Heavy commercial should not be placed adjacent to use that are incompatible to heavy commercial uses.

Industrial - Allows general industrial uses.

Public Facilities - Governmental agency uses.

Medical Related - Encourages the development of concentration of medically related services adjacent to the hospital.

Harbor Dependent - Activities which would require immediate access to the harbor waters.

Harbor Related - Activities are dependent in some way upon a harbor location.

Harbor Consistent - Activities which would benefit from a harbor location and would enhance the overall viability of the harbor.

Open Space - Includes parks, beaches, wooded areas, cemeteries and other areas of a similar nature and value.

GENERAL PLAN LAND USE DESIGNATIONS

City Zoning Ordinance*	Residential	Multiple Family	Commercial	Industrial	Public Facilities	Medical Related	Harbor Dependent	Harbor Related	Harbor Consistent	Open Space
Residential										
R-1	X									
R-1B	X									
R-2	X	X								
R-3		X								
RP		X	X			X				
Commercial										
C-1			X			X	X	X	X	
C-2			X				X	X	X	
HS			X				X	X	X	
CM			X				X	X	X	
Industrial										
M				X			X	X	X	
MP				X			X	X	X	
Open Space										
O	X	X	X	X	X	X	X	X	X	X

* Harbor Designations outside of the City which would be compatible with similar County Zoning Designations.

X Zones that are compatible with Land Use Designations.

HARBOR DISTRICT



CRESCENT CITY HARBOR

The Crescent City Harbor was granted to the Town of Crescent City by the California State Legislature in 1886 and has long been recognized as a prime asset to both the City and County. A harbor district with county-wide taxing authority was created in 1953 to develop the harbor's facilities and potential. Under the State of California's Harbors and Navigation Code the Harbor District has been empowered to perform the following planning functions:

"It may layout, plan and establish the general plan and system of harbor and harbor district improvements and modify the plan and prescribe the specifications for such improvements."

Harbor activity is subject to continuing review and evaluation by agencies and authorities involved in the development of the harbor. The Crescent City Harbor District is primary in the development, review and evaluation of activity in the harbor. The following agencies are also directly or indirectly involved in harbor development and in maintaining the viability of the harbor:

Del Norte County
City of Crescent City
U.S. Army Corps of Engineers
Economic Development Administration,
U.S. Department of Commerce
California Department of Navigation and
Ocean Development
California Coastal Zone Conservation Commission

HARBOR FACILITIES

The port of Crescent City is a natural harbor. The harbor is protected by an outer breakwater 4,700 feet in length from Battery Point toward Round Rock, south of the mainland. A dog-leg extension of the outer breakwater was constructed under the direction of the Army Corps of Engineers. The Sand Barrier, a rubble-mound structure extending from the shoreline on the east side of the bay westward to Whaler Island, was also constructed under the authority of the Army Corps. An inner break water extends some 1,200 feet north of Whaler Island with a 400 foot westerly extension added in 1972-73. The Inner Harbor Basin is a small boat moorage basin with an authorized depth of 12 feet at M.L.L.W. (mean low, lowwater). The Outer Harbor east of the outer breakwater, is primarily designed as a turning basin for lumber and petroleum vessels dredged to a depth of 20 feet (as is the oil terminal facility area immediately between Citizens Dock and the inner breakwater).

Docks existing within the harbor are as follows:

- (1) Dutton's or Chamberlain's Dock. This privately owned structure is currently not in use because of wave action in inclement weather and reduced

harbor depth due to sand accretion.

- (2) Citizen's Dock. This Y-shaped wooden dock was constructed in 1950, and is heavily used for unloading the catch of commercial fishermen and for hoisting small boats in and out of the water. Expensive to maintain and costly to insure, the Citizen's Dock none the less is serviceable and heavily utilized.
- (3) Fish Processing Docks. (2) Each of the two fish processing plants located at the harbor has its own dock for unloading shrimp, fish and crabs from commercial fishing vessels. These facilities are owned by the Harbor District and leased to private operators.
- (4) Coast Guard Dock. A dock was constructed by the Harbor District for the Coast Guard vessel stationed at the harbor. It is located between the fish processing docks and a planned new marine repair facility.

The Harbor District owns and operates its own dredge. Although this has reduced the cost of dredging, environmental constraints on placement of sand dredged from the harbor have limited its use.

The Harbor District has received a grant from the Economic Re-development Administration to construct a boat service and marine repair facility. This facility will provide service to boats from 15 to 100 feet in length and weighing up to 230 long tons. Designed to minimize environmental impact, the new facility will provide a paved and drained area for washing boat hulls, an enclosed service area, a machine shop, a small marine store, open storage and working areas, and paved parking. Improved marine ways will be needed to fully utilize the potential of this facility.

A modern, full service, protected, commercial boat basin was constructed in 1974, also with the assistance of an Economic Development Administration Grant. The basin contains berthing slips that can accommodate 249 boats, of a maximum length of 70 feet. Each slip is provided with water and electrical outlets. Although there are seasonal vacancies for the larger boats, additional berths have been requested to accommodate the demand for space for the smaller boats.

A sportboat marina is located along the access road to Whaler Island. It consists of a series of floating docks which can accommodate 350 boats of a maximum length of 24 feet, a small tackle shop, a building for small boat sales and engine repair, and a fast-food service facility. Two charter boats and 15 rental boats are available at the marine. The demand for additional small boat docks is strong.

An undersea aquarium is located at the southeastern corner of the outer basin. There is a restaurant at the entrance to the harbor and one is located at the harbor.

The 95 foot U.S. Coast Guard Cutter, "Cape Carter" is stationed in the harbor. The Coast Guard leases and maintains berthing space and a building.

A bulk oil receiving facility owned and operated by the Oil Terminals Company is located on the harbor side of the inner breakwater. There are two pipelines, 6 and 8 inches in diameter, connected to an 8,000,000 gallon tank farm along Route 101 about one-half mile from the harbor. The petroleum products are distributed from the tank farm throughout the County and Southern Oregon by truck. Approximately 72,000,000 gallons per year are handled presently.

Two county roads (Citizens Dock Road and Anchor Drive) approximately 1/4 mile each in length connect U.S. Highway 101 with the commercial center of the harbor, the new boat basin, Citizens Dock and the sport marina. These facilities are on the southeast side of the harbor. The north side of the harbor is served by Front Street, Howe Drive and "A" Street which are City Streets.

ON-GOING STUDY PROJECTS

The Harbor District has the following proposed plans under consideration for harbor improvement in design, safety and utility:

- A) Extension of the existing outer breakwater toward Round Rock.
- B) A companion breakwater to the above extending southerly from Whaler Island.
- C) Maintenance dredging of the harbor and disposal of dredged sediments.
- D) Littoral sand movement and its relationship to harbor sanding, beach sand replenishment and coastal bluff erosion (north of Battery Point).
- E) Expanding commercial fishery facilities.
- F) Improving tourist and sport fishery facilities.
- G) Installation of a Syncrolift and marine way to supplement the marine repair facility.
- H) Revitalization of barge shipments.
- I) Refinement of seafood processing waste disposal facilities.

The Crescent City Harbor is susceptible to southerly storm waves, tsunamis, surge waves and sand accretion. A U.S. Army Corps of Engineers model study showed that extension of the outer breakwater to Round Rock, and construction of a companion breakwater from Whaler Island to near the harbor entrance would provide the necessary protection.

Sand accretion is a continuing problem of maintenance within the harbor. The continuing dredging operations conducted within the harbor by the Harbor District and the periodic dredging by the Army Corps of Engineers indicates the degree of sand accretion. Disposal of dredged sediments is as difficult a problem as the accretion of the sediments. The Harbor District has used dredged sediments as fill and has deposited sediments North of Battery Point (at the hospital), temporarily reducing the amount of coastal erosion in the area.

In order for the marine repair facility to be fully utilized, it is necessary that facilities be provided for hauling boats out of the water quickly and economically with a large degree of safety. The installation of a 230 ton Syncrolift marine way, adjacent to the boat repair facility, would accomplish these factors. The Syncrolift marine way is a platform which is raised and lowered in a boat slip by synchronized winches which automatically adjust for weight distribution.

In 1959, one of the peak years of lumber production, total lumber output amounted to about 435 million board feet. Approximately 90% of this lumber output was shipped by water from the Crescent City Harbor. With the improvements of U.S. Highways 101 and 199, and the decline in timber output, (approximately 304 million board feet in 1975) inadequate water depth and lack of wave protection, plus other factors, the use of the harbor for lumber export is presently nonexistent. The potential for port shippage of lumber, is a continual possibility; should truck transportation cost rise significantly the only alternative for lumber export from the County is the harbor. In addition should inland mining operations of chrome and laterite ore materialize; ore shipments could necessitate redevelopment of barging facilities.

LAND USE

Land uses within the harbor area are concentrated in segments. The residential area is located at the Northwestern corner of the harbor. This relatively sheltered and removed use of the harbor comprises less than 1% of the total. On the harbor side of this residential area is a historically industrial area (Chamberlain Dock), presently not in use. Also located in this area is the City's attractively designed sewer facility. Between Chamberlain Dock and Elk Creek, and Between Front Street and the waters edge, is the concentration of the public recreational area. Within this "beachfront" is a public swimming pool, cultural center, a large park with benches and tables, a playground and other facilities. The development around Citizens Dock in the Southeastern portion of the harbor is the primary concentration of land use within the harbor. Commercial, heavy commercial and light-industrial are the key activities in this area as they serve as support facilities for the commercial fishing industry. Commercial recreational facilities are focused on the far Southeastern section of the harbor on and adjacent to the South breakwater (or sand barrier). These facilities include sport fishing shops, sport boat docking, commercial aquarium, take-out food restaurant and a recreational vehicle park.

Vacant land on the waters edge remains in only two limited areas. They are Whaler Island and between the boat basin and a recreational vehicle park on Elk Creek. Other vacant land and commercial activities are located landward toward Highway 101 and east of Highway 101.

The largest land use within the existing breakwaters and the shoreline is water. Approximately 2/3 of the harbor is water; however the availability for use other than for boats is limited. The open water of the harbor is needed to allow sufficient maneuvering room for barges and general harbor traffic. The confined waters, boat basin and inner harbor, are fixed in their size and would not be appropriate for additional filling.

LAND AVAILABLE

The recent development and construction in the harbor, centering around Citizens Dock, has dramatically reduced the amount of available harbor frontage. In the early 1960's harbor use consisted of activities at Chamberlain Dock and Citizens Dock. Harbor frontage available was as follows: 1600 feet between Chamberlain Dock and Elk Creek, 3200 feet between Elk Creek and Citizens Dock, 600 feet between Citizens Dock to the Sand Barrier and the length of the Sand Barrier and all of Whaler Island. In 1975-76 harbor use focuses on the Citizens Dock area with Chamberlain Dock in a dormant stage due to cessation of lumber barge shipments. However, the amount of available harbor frontage is as follows: 1200 feet between Elk Creek and Citizens Dock, approximately 1000 feet on the Sand Barrier and all of Whaler Island. This 70% reduction in available harbor frontage is of critical importance to the harbor and to the City and County. Future commitments of this harbor frontage to uses other than harbor dependent uses could preclude later harbor development.

Vacant land located between the harbor and Highway 101 totals approximately 36 acres with 19.12 acres facing the boat basin and 11.18 acres removed from the immediate harbor. Available land east of Highway 101 for future harbor related development consists of two triangular pieces of land 33.5 acres and 31 acres in size. This 60 acre area is the only direction in which harbor related development can expand. The harbor is hemmed in to the north by the city. Expansion to the south would be out of the harbor area and into a prime wetland area. Expansion west would involve filling the harbor and would destroy the visibility of the harbor itself. This expansion area eastward of Highway 101 was historically a farming area which is indicated by the presence of an existing orchard, however with the construction of Highway 101 the drainage pattern of the area was impaired and presently the area is subject to standing water. To the east and southeast of this area is located two significant habitat areas, the Sandmine Wetland, and the Sitka Spruce Stand. Future harbor expansion and development is therefore limited to this area and will involve prudent and necessary precaution to insure the integrity of the two adjacent habitat areas.

GOAL FOR HARBOR DEVELOPMENT

The Crescent City Harbor and waterfront should be developed with a view towards optimum utilization of its commercial and recreational potential while allowing for appropriate public and private uses, developing access as a harbor, conserving the harbor's open water, improving the harbor's aesthetic appeal and increasing

its economic viability. Functional relationships between the proposed development, its land use, degree of harbor dependency, location and circulation should serve as guides to the location, types of uses and activities permitted within the harbor and harbor expansion areas.

POLICY

To accomplish the above goals, the following policies should be considered by the Harbor District:

Harbor Safety and Design

- P-1 The County, City and Harbor District should continue to petition appropriate federal and state agencies to accelerate the study of littoral sand movement and its relationship to harbor sanding, beach sand replenishment, and coastal bluff erosion (north of Battery Point).
- P-2 The Harbor District, City and County should apply for assistance in evaluating the cost-benefit ratio of an extension of the breakwater system in relationship not only to tonnage shipped from the harbor, but also in protecting the substantial investment in local, state and federal agencies.
- P-3 The present Coast Guard Dock and Station do not allow an immediate view of vessels crossing the entrance bar. The dock locates the cutter in the more congested area of the harbor which increases its time to be underway. Construction of personnel quarters and docking facility removed from the congested area of the inner harbor basin should be considered by the Harbor District and the Coast Guard. The dock could be of filled material which would reduce maintenance and increase available space. The inner side of Whaler Island has been considered as a possible location.
- P-4 With the construction of the Coast Guard Helicopter facility at McKinleyville, a pad facility will be needed in the Harbor area for emergency use. In that this use would be infrequent and not water dependent the most feasible location which would allow sufficient room, reduce hazards to landing and take off, and be of reasonable cost would be east of Highway 101.
- P-5 The wooden construction of Citizens Dock is expensive to maintain and costly to insure. Consideration and study should be given to replacing the wooden structure with aggregate fill. Investigation into the effects of a solid fill would be necessary prior to construction to examine the effects upon currents and sand accretion, and provide for proper design.

Access as a Harbor

- P-6 Primary to the ability of the harbor to function as a port is the maintenance of proper depths within the harbor. The littoral drift of sand has been interrupted by the construction of the harbor breakwaters. A study of the harbor estimates that 80,000 cubic yards per year accumulate within the harbor of which only 463,500 cubic yards of sand have been removed by the Army Corps of Engineers since 1936. Lack of proper maintenance dredging has discouraged shipment. The Harbor District, City and County should continue to press the Corps of Engineers to fulfill their maintenance obligations for the harbor depth.
- P-7 The reoccurrence of barge shipments of lumber has strong potential. Increasing cost of fuel and legislation which is encouraging conservation of fuel are strong influences in the use of water transportation. The instability of governments in the African nations, which supply chrome ore, create the possibility of the revitalization of chrome ore mining in the county. Water borne transportation would be the cheapest method of transporting unrefined ore. Present barge use consists of petroleum shipments, however, due to the lack of sufficient depth the barges arrive with only half-capacity loads. The Harbor should continue to strongly petition the Army Corps to maintain the appropriate depths for barge shipment. The Harbor should not allow any development which would preclude resumption of barge shipping.
- P-8 Of the remaining available harbor frontage, Chamberlain Dock area and the area between the boat basin and Shoreline Campground should be reserved for water dependent development. These sites could be used for temporary, readily removed, uses prior to actual development.

Circulation

- P-9 The City should improve access to the Harbor by co-operating with the Harbor in extending Howe Drive across Elk Creek to the boat basin, or explore other alternatives as the need arises.
- P-10 Harbor expansion east of Highway 101 will increase cross-traffic at Citizens Dock Road and Highway 101. Improvements in traffic control should be requested from Caltrans.

Harbor Development

- P-11 The continuing development and expansion of the Harbor should seek to satisfy as reasonably as possible all commercial, recreational and public demands. In planning for the limited area of the harbor, the plan should consider reserving portions of the harbor area and its expansion are in the following three categories:
- 1) Harbor Dependent - Those activities which would require immediate access to the harbor waters.
 - 2) Harbor Related - Activities which are dependent in some way upon a harbor location.
 - 3) Harbor Consistent - Activities which would benefit from a harbor location and would enhance the overall viability of the harbor.
- P-12 The Harbor should develop design criteria for new construction in the harbor, specifically in regards to establishing a motif for commercial activities.
- P-13 The County, City and Harbor District should continue to effectively plan and co-ordinate for the overall development of the harbor and its adjacent land.



ENVIRONMENTAL IMPACT REPORT
REVISED DEL NORTE COUNTY
GENERAL PLAN

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I. INTRODUCTION

This Environmental Impact Report has been prepared to evaluate the probable environmental effects of the County of Del Norte's General Plan. It has been prepared in compliance with the State mandate requiring the preparation of Environmental Impact Reports (EIRs) for projects which may have a significant effect on the environment, and in conformance with both State and local guidelines for the preparation of an EIR.

The discussion which follows is necessarily presented at a generalized level, since the Plan's impacts cannot be predicted with the same accuracy as the impacts associated with a site-specific construction project. Also, it is assumed that all the policies and recommendations contained in the Plan text and depicted on the accompanying maps will in fact be implemented.

Finally, if this EIR is to be a useful information document, it should present the analysis in as concise, yet thorough, a form as possible, and it should serve as a framework against which the impacts of future, more detailed projects can be compared. For these reasons, this EIR

- * integrates the discussion of the various points required in an EIR, where possible, to minimize repetition;
- * incorporates information by reference, where possible, since many of the points required in an EIR are discussed in the Plan;
- * addresses economic, fiscal and social impacts, in addition to environmental impacts, in light of the goal for eventually placing social and economic concerns and impact assessments on an equal footing with those relating to environmental effects of development.

II. PROJECT DESCRIPTION

A. Background

The project consists of the Del Norte County General Plan text and maps, as well as all background documents utilized in its preparation. The project has been prepared to revise and update the existing General Plan (adopted in 1973) and the Conservation and Open Space Element (adopted in 1974), and to incorporate the other elements subsequently required in a General Plan by State Law. The Plan recommends policies and programs to guide the development of Del Norte County according to the environmental, economic, fiscal and social objectives of local residents. These

1. State Administrative Code, Section 15037(1). The adoption and amendment of local general plans or elements thereof constitutes a "project".
2. State Government Code, Section 65302 requires the preparation of nine General Plan elements: land-use, circulation, housing, conservation, open space, seismic safety, noise, scenic highway and safety. The last four are "new" elements in the Plan which have not previously been prepared.

policies will form the basis for the translation of the Plan into specific actions, such as the establishment of consistency between the General Plan and the Zoning Ordinance.

B. Objectives

The overall objective of the Del Norte County General Plan is to preserve the natural environment to the greatest extent possible and to promote positive environmental, economic, fiscal and social values of the area while accomodating the forecast population growth. The Plan's land use and development policies are designed to accommodate 5,200 additional residents in the Planning Area; while this forecast is not anticipated to be reached until 1995, it could occur earlier or later.

The Plan can thus be characterized as a "growth accommodation" plan, by which the City and County neither discourages growth nor stimulates excessive growth, but rather controls and guides it according to the developmental principles expressed by the Community. It is inevitable that this objective implies inherent tension as efforts to accommodate new development may imply the sacrifice or preemption of certain resources. For example, the designation of land areas suitable for new development, and especially of land priced within a range suitable for low and moderate income housing, may imply the withdrawal of land from agricultural production. The Plan policies and recommendations at times include trade-offs between conflicting values; these conflicts are examined in more detail in Sections IV - VII of this report.

III. PROJECT SETTING

This section is organized under the three subject headings: Environmental, including the physical characteristics of both the natural and urban environments in the Planning Area; Economic/Fiscal, including issues pertinent to the local and regional economy, and to the extent and distribution of public services and facilities; Social, including the interaction of the above items, and other factors which relate to the "quality of life", or the degree of satisfaction of the needs and desires of individual residents and the County as a whole.

While these topics are interrelated and frequently overlap, they provide a useful format for evaluating the range of potential impacts associated with a project.

A. Environmental Setting

The project boundaries consist of the County of Del Norte and the City of Crescent City. A number of highly valued resources are found in the County including:

- * prime agriucltural soils (rated above 80% on the Storie index);
- * other natural resources, Lakes Earl and Talawa, the forests, the coastal sand dunes and off-shore rocks and islands,

- the Smith and Klamath Rivers, and associated regimes;
- * a diversity of wildlife;
- * a built environment characterized by structures of aesthetic and historic significance.

In terms of accommodating urban development, the physical environment also imposes a number of constraints, such as flood, fire and seismic hazards. The existing pattern of urban use of land is characterized by a concentration of development around Crescent City (with undeveloped pockets) with scattered development throughout the County along the major highways and large undeveloped areas removed from these highways.

Air Quality: The airshed in much of Del Norte County can be considered quite pristine. The population concentration areas along with the highway system are the primary air pollutant sources. Because of the County's rural nature, limited population, and lack of extensive industrial development, the ambient air quality can be expected, in general, to be well below established State and Federal standards. For additional information see "Project Independence Economic Development Action Plan and Strategy" Del Norte County, December 1975, page A2.

Climate: Conservation Element page 3.

Topography and Drainage: Conservation Element page 11.

Soils: Conservation Element page 4.

Geology: Seismic Safety and Safety Element page 9.

Cultural Resources: Conservation Element page 22.

Water Resources: Conservation Element page 11.

Vegetation and Wildlife: Conservation Element page 18.

Land Use: Land Use Element and accompanying maps.

Traffic and Noise: Noise Element.

Public Utilities: Water Supply and Wastewater Disposal, (Separate Document) October, 1972.

B. Economic/Fiscal Setting

Del Norte County's economic base is closely tied to the lumber industry, which in turn is affected by national and international economic events and trends. The labor force contained 6200 people in July, 1975 with total employment for that month being 5175. Total personal income in the County in 1973, the latest date available, totaled \$68,934,000 (1973 prices). This represented .06% of personal income in the State from a county representing .64% of its geographical area.

The quality of the potential labor force in the County, measured in terms of vocational education, may deter economic development. The median school year completed in Del Norte County is below the State median. Since compulsory education is a State-wide phenomenon, the deficit can be most easily associated with the lack of post-secondary training among the County's populace. The lack of easily available, post-secondary educational programs, which exist in most other counties in California, is the likely cause of this deficit. The declining employment opportunities associated with lumber related industries and the seasonal nature of tourism is expected to impose constraints on the future rate of

the County's growth.

The economic focus of the County is the City of Crescent City, the only incorporated area within the County. Crescent City provides the location for the majority of professional, commercial and service oriented activities. The City continues to provide an increasing level of public services and activities outside of its incorporated limits. The City is participating in a regional sewerage treatment and collection system and provides city water to its surrounding area. Problems persist, however, with respect to the occurrence of urban development without the provision of full urban services, in the unincorporated area of the County.

C. Social Setting

Eighty percent Del Norte County's 1975 (15400) population resides within the Crescent City area. Other population centers are at Smith River, Fort Dick, Hiouchi, Gasquet and the Terwer Valley (Klamath). The recorded 1970 census resulted in the following:

Under 5 years of age	1169 (8%)
5 through 14 years	3233 (22%)
15 through 19 years	1327 (9%)
20 through 44 years	4232 (29%)
45 through 59 years	2558 (18%)
60 and above	2061 (14%)

Over the past 20 years there has been a trend in a decreasing percentage of the population in the 20-44 age group and an increase in the over 45 age groups.

The opportunity for a diversity of lifestyles and activities has been hampered by the lack of employment opportunities and a shortage of housing for lower-income families and age groups.

If predictions of timber cuts in the future decades are in fact at a lower rate than present figures (which is highly likely to maintain a sustained yield cut) economic improvement and population increases may depend entirely on economic diversification.

For a further discussion of existing social conditions refer to the Housing Element contained within the Plan.

IV. PROJECT IMPACTS

This section examines the beneficial and adverse impacts associated with the General Plan. The beneficial impacts discussed are intended to provide some flavor of the types of policies and recommendations contained in the Plan; necessarily these impacts describe cumulative, long-term effects. The adverse impacts discussed are largely concomitants of the Plan's implementation, and, unless indicated by the preface "possible", are impacts which cannot entirely be eliminated.

A prediction of the Plan's impacts is difficult for several reasons:

- * a particular recommendation, such as a housing code enforcement program, may produce both beneficial and

adverse effects--until the program's full consequences are fully evaluated, only the possible outcomes can be described;

- * two recommendations may tend to cancel out each other's impacts, such as the overall effects on air quality resulting from efforts to accommodate population growth (hence, more automobiles), but also efforts to encourage alternative transportation modes (hence, lower automobile usage);
- * finally, insufficient information exists on which to base an opinion, and continuing assessment and monitoring of the actual effects of plan implementation will be required.

In this and subsequent chapters, such difficulties will be pointed out in order to outline major issues which should be considered in public EIRs.

A. Environmental Impacts

Beneficial:

- * the preservation of highly valued natural resources;
- * an orderly pattern of development, with the emphasis on development of areas within or adjacent to existing urban areas, and in close proximity to essential public services and facilities;
- * the restriction of, or strict controls over, development in areas of natural hazard;
- * the preservation of the character of Del Norte County;
- * an improvement in the location of proposed residential, commercial and industrial land uses.

Adverse:

- * the removal of land from its natural setting for development purposes;
- * the impact associated with the construction of public and private works, such as noise, dust, fumes, vibration, neighborhood unsightliness, the alteration of the landscape, and the expenditure of energy;
- * incremental increases in air, water and noise pollution, associated with new development;
- * possible increase in traffic congestion at the intersection of Highway 101 and Beckstead Avenue at Smith River.

B. Economic/Fiscal Impacts

Beneficial:

- * increased employment opportunities for local residents, based on the provisions of land on which selected new industry may be encouraged to locate;
- * enhancement of the downtown Crescent City area;
- * the minimization of future costs for public services and facilities by a rational allocation of improvements at a level consistent with local needs;
- * the "upzoning" of various properties, with a potential

- appreciation of land value;
- * the maintenance of natural resources which provide the basis to our local economy;
- * enhancement of the waterfront area of the Harbor and City.

Adverse:

- * The capital and operating costs required to implement the Plan recommendations;
- * the "downzoning" of some properties with a potential depreciation of dollar land values in some locations.

C. Social Impacts

Beneficial:

- * an increase in the supply of housing for low-income families and age groups;
- * an improvement of the public health and safety associated with natural hazards;
- * the addition of new recreational facilities.

Adverse:

- * possible punitive aspects of a housing rehabilitation and code enforcement program if, despite precautions, the program results in increased rents for low income families and in the possible removal of some sub-standard housing;
- * resentment on the part of some local residents towards increased government controls over land use; of opposition toward policies of residential densities; and similar sentiments.

V. MITIGATION MEASURES

A. Plan Preparation

The General Plan Program has been designed to maximize citizen involvement in the preparation of the Plan, and thus minimize the adverse social impact associated with the exclusion of local residents from having a voice in determining the future development of their community.

B. Plan Policies and Recommendations

As stated, the General Plan provides for the orderly growth of the Planning Area with minimum adverse environmental, economic/fiscal and social impact on the communities. The Plan itself, then, can be regarded as mitigation measure designed to reduce the adverse impact associated with existing and proposed development, and as promoting the positive aspects of the environment. Again, it is assumed that the Plan will in fact be implemented.

For examples of the Plan's mitigation effects the reader is referred to the policy proposals and the implementation recommendations contained in the Plan text. Likewise, the reader is referred to the Plan maps, where the land use pattern has been designed to respect natural resource hazard areas and other areas of positive natural value, yet allow sufficient acreage for

development both to accommodate the forecast population and to allow for flexible operation of the housing and construction market.

The following mitigation measures contained in the Plan constitute efforts intended to directly reduce the adverse impacts associated with the implementation of the Plan itself:

- * recommended amendments to the zoning ordinance;
- * the recommended adoption of a noise ordinance, including the specification of acceptable noise levels for industrial developments;
- * a proposed increasing investment of public resources in public transportation, and in bicycle and pedestrian facilities, with a potential reduction in automobile miles traveled and a potential improvement in air quality;
- * proposed requirements for more detailed analyses in areas which require further investigation, such as on-site soils and geologic engineering studies for proposed projects in areas of moderate to high landslide risk and in areas of potential liquefaction and settlement.

C. Energy

The Plan contains both explicit and implicit measures designed to minimize the unnecessary consumption of energy and to mitigate the adverse impacts associated with the potential recovery of energy resources in the Planning Area. These measures include:

- * policies of encouraging land uses which are self-supportive, or minimally dependent upon large scale imports of fossil fuel, and of crop production methods which encourage human labor;
- * promotion of noise reducing and energy efficient building design;
- * promotion of alternative transportation modes which minimize energy consumption.

VI. ALTERNATIVES

It is very difficult to isolate alternative courses of action to the General Plan, since the Plan expresses not only the commitment of the community to revise the existing General Plan, but also defines the guidelines for the community's development, as expressed by local residents, against which future development proposals should be evaluated.

Three hypothetical "alternatives" are described below:

- * retention of the existing General Plan (the "no-project" alternative);
- * adoption of a Plan to discourage population growth (the "no-growth" alternative);
- * adoption of a Plan which provides for a rate of growth in excess of reasonable forecasts (the "stimulated-growth" alternative).

The "no-project" alternative is included to indicate the possible

consequences of not revising the General Plan. The latter two alternatives represent end points on a "growth" continuum, and indicate some of the concerns which have shaped the Plan's preparation. The Plan can be regarded as a balance between these two extremes, in that it is intended to accommodate the forecast population, while neither discouraging nor stimulating this growth.

A. No Project

The "no-project" alternative would consist of the retention of the existing General Plan and the adopted Open Space and Conservation Elements, together with the subsequent adoption of noise, seismic safety, safety and scenic highway elements as required by State Law.

The data, assumptions and community values reflected in the development of the existing (1973) General Plan are outdated, and so the adequacy of the existing land use, housing and circulation elements is open to question. The adverse impacts associated with the "no-project" alternative would consist not only of a piecemeal and incremental application of policy, and the lack of comprehensive policies for the long-term development of the Planning Area, but also the possibility of legal challenges being brought against the City and County.¹

B. No-Growth Plan

A "no-growth" General Plan can be characterized as an attempt to restrict future in-migration, either directly by a numerical limit on components of population or housing, or indirectly, by restrictive controls over land use, public services and facilities, and other similar devices.²

Generally, it appears that a no-growth plan for the Planning Area would generate fewer environmental impacts locally. That is, fewer areas which are currently in a natural state (e.g. in agricultural production or forest) would need to be designated for future development in the Planning Area. Similarly, the negative impacts associated with new development, such as air, water, and noise pollution, would be minimized since little new development would occur.

The economic/fiscal and social impacts of a no-growth plan would appear to be favorable. The competition for local service employment opportunities would be reduced, no expenditures would be required for expanding existing public services and facilities, and the rural character of the County would be preserved.

1. The inadequacy of a General Plan element can furnish the basis for litigation. See City of Oakland vs. City of Alameda et. al., State Superior Court for the County of Alameda, No. 450083-0.
2. In the absence of a detailed plan proposal, the impacts associated with an hypothetical "no-growth" General Plan and likewise, for a "stimulated-growth" plan can only be approximated; the impacts described are meant only to suggest possible implications, and are not exhaustive or definitive.

More likely, though, a no-growth Plan would generate adverse consequences. Such a plan would reduce employment opportunities, as export industries would be limited in their choice of labor, and as investors in the service economy would be reluctant to invest in a community which is not growing. Also, improvements to certain public facilities, such as sewer systems, will be required irrespective of local growth policies; with a "no-growth" philosophy, the per capita cost of these services would be increased.

A no-growth plan is likely to generate serious adverse social impacts, especially on low-income families. If the City and County were to impose a ceiling on its population, the local housing shortage would be even more intensified, and the costs of housing would increase dramatically.

C. Stimulated-Growth Plan

A General Plan designed to permit growth of any kind in any location can be characterized by three factors:

- * an extravagant allocation of land for development in all land use categories;
- * laxity in development control requirements;
- * the programming of services and facilities at a level beyond demonstrated or projected need, in order to facilitate new development or to accommodate development which occurs in a less than optimal pattern from standpoint of cost-effectiveness and rational capital investment policies.

A "stimulated-growth" plan would generally increase employment and housing opportunities in the Planning Area (in the absence of any exclusionary devices) but would generate serious environmental and fiscal consequences, such as:

- * patterns of haphazard and piecemeal residential development, resulting in a despoliation of valued natural resources;
- * costly urban service extensions and unnecessary oversizing of facilities;
- * increased air and noise pollution, due to increased levels of automobile commutation, and usage not susceptible to substitution by public transit;
- * possible decline in water quality, and as the potential is increased for urban level development in rural areas without access to municipal sewage treatment;
- * Continued strip commercial development and the attendant visual blight.
- * loss of the natural resources which are the basis of the County's economy.

VII. SUMMARY OF PROJECT CONSEQUENCES

A. Growth Implications

As stated, the essential aim of the General Plan is neither to stimulate or to discourage future population growth, but rather

to control and guide such growth as appears likely to occur, in accordance with the development principles expressed by local residents. These principles are based on the maintenance of the natural environment to the greatest extent possible, but also on the promotion of economic, fiscal and social equity and balance.

Certain policies and recommendations contained in the Plan may be regarded as growth-inducing, since they could foster population and economic growth even though they are intended to address the needs of existing residents. For example, efforts such as the provision of low and moderate income housing, the encouragement of selected industries to locate in the Planning Area, and the acquisition of additional open space and recreation areas, all enhance the attractiveness of the County as a place to live. While these efforts are designed to solve existing economic and social problems, they may conceivably entice residents from other portions of the State to move to Del Norte.

B. Cumulative and Long-Term Effects

The intent of the General Plan is to lay the groundwork for the plans, programs, services and facilities which will broaden the beneficial uses of the environment for both present and future residents. In order to assure this long-term productivity, compromises have been struck between desirable environmental, economic, fiscal and social goals. While the Plan allows for the accommodation of future development, it also guides this development to areas appropriate for development, areas which are in proximity to the existing water and sewer infrastructure, which are not flood-prone, and which preserve the agricultural, forest and other unique resource areas within the Planning Area.

Certain resources would be committed in the course of the Plan's implementation, such as the irreversible commitment of energy, and of some land which is currently in agricultural production or which is forested, to residential uses. Other impacts, such as the increases in noise, air and water pollution, and the increase in traffic congestion which attend development, could be significantly mitigated if the Plan's recommendations are adopted.

Mitigation measures are contained in the Plan to ensure that Del Norte's future generations are not needlessly committed to either a "no-growth" or "stimulated-growth" future. The new public services and facilities indicated in the Plan are intended to discourage both premature development or over-development in the absence of necessary improvements.

C. Overview

The General Plan is directed toward achieving a balance between the protection of natural resources and the accommodation of human needs, such as housing, jobs, and public services, which all contribute to an attractive environment and improve the "quality of life." These environmental, economic/fiscal and social benefits ensure that any adverse impacts associated with

the implementation of the Plan are not generated merely in the interest of short-term gain.

Finally, the Plan, while establishing the framework for the long-term development of the Planning Area, also keeps options open for the future. In some cases, the Plan calls for more detailed investigations and more specific plan proposals in order to ensure that the subsequent program fits particular local needs in terms of specific intent defined at each point in time. Likewise, the continuous monitoring of the Plan's policies is encouraged, so that if the assumptions underlying the Plan's preparation shift dramatically (i.e. the forecast population is achieved prior or subsequent to 1995), then the policies and provisions can be appropriately modified.

NOISE ELEMENT

DESCRIPTION OF PROJECT:

The Noise Element for all city and county general plans in the State of California is mandated by the State Legislature due to the increasing risk associated with high levels of noise throughout the primarily urban areas of California. Del Norte County, although not considered an urban county or an urban area, does have urbanizing areas that are beginning to experience many of the difficulties associated with noise that is impacting the larger urban areas. Therefore, the Noise Element is required for the County and its communities due to the real but very difficult assessments of noise hazard and control.

Section 65302(g) of the Governmental Code and the Council on Intergovernmental Relations Guidelines, issued in 1973, give scope and direction for the development of a Noise Element. The Del Norte County Noise Element has been prepared with these guidelines in mind.

RELATIONSHIP TO GENERAL PLAN:

The Noise Element is a State mandated Element of the General Plan for every county and city. The Element meets all requirements of the adopted State guidelines as promulgated by the California Council of Intergovernmental Relations. It offers a variety of ways in which to mitigate noise hazards within communities and the environment as a whole. It relates specifically to transportation and to land use as well as structural standards.

THE ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION:

The Environmental Impact of the proposed action would be primarily beneficial to the County in that it would give scope and direction to areas of concern regarding noise problems. The cost of carrying out the program involves an initial \$3,000.00 commitment for monitoring equipment plus related equipment which must be used to obtain accurate base data. Much of the data used in the Element is taken from secondary sources and interpretations of that data have been made in order to meet the requirements of the Element. Physical alterations of the environment will no doubt be required, particularly where funding for development by FHA or HUD is required. Walls, berms, acoustical treatment of structures, and other mitigating measures are necessary if noise is to be prevented. The impact will be felt upon the source of the noise itself, namely the person or device which is creating the noise, the path in which the noise is carried which could

activity is limited. Aircraft flights in and out of the County are few in number so that the major problems that cannot be avoided are associated with the principal highway routes, U.S. 101 and U.S. 199. The number of vehicles per day is not of great concern providing that the percentage of truck traffic in that count is relatively low. If truck count traffic is high, then the noise levels will be considerably higher; the pitch, duration and frequency of noise will be considerably different than if the route were carrying only automobiles. In addition, the county is part of a statewide system of highways that traverse the entire State of California and the environmental effects which are associated with highway noise cannot entirely be avoided. Assuming that the population of California increases, or that tourist traffic increases, there would be no way to avoid noise except by altering the environment by building berms, walls, and other devices to obstruct the noise as it travels in a direct path and affects the land uses adjacent to highways.

Where difficulty will rise in the land use planning process is when land uses are placed adjacent to either existing or proposed high density corridors of traffic. Land uses such as mobilehome parks, motels, and the critical facilities such as hospitals, parks and resthomes must be carefully placed in order to avoid noise environments. Assuming that the land use allocation process is currently carried out as recommended in the County General Plan, noise should not be the determining factor. When the policies are violated, then irreversible and adverse environmental effects may be created.

MITIGATION MEASURES PROPOSED TO MINIMIZE THE IMPACT:

The project in itself proposed mitigation of potential impacts on the environment. The information contained in the element and the possible applications are such that human activities will be more likely to be distributed within the County in such a fashion that the noise hazards to humans and the environment will be lessened.

Numerous mitigation proposals to reduce or eliminate noise are contained in the Element. These include recommendations regarding the construction of critical facilities and residential developments, the location of various industrial and transportation facilities, and placement of land uses. The proposed monitoring system and program are the backbone of the mitigation procedures that must be used if the County is to become a quieter place in which to live, work and play. In some cases it is merely a question of maintaining the present background levels of noise so that they do not become excessive over a period of time. In order to do this, a monitoring system must be established or the Element will

include for example, the construction of walls or tree plantings, and the point where noise is perceived, such as in homes, parks and schools. The receiving end of the noise may in many instances be the point at which mitigation must occur since the noise source may have already been pre-established and the new development going in will have to take measures to mitigate that noise at the property lines. Essentially, the Noise Element is in itself a mitigating measure that if properly carried out and executed, can minimize the dangers to human health, to the environment and to development. For example, caution should be exercised in building in those parts of the County that are exposed to high levels of noise or that have the potential of being exposed to high levels of noise. The Element points out these areas of concern and those aspects of the environment that are man-made in character such as hospitals and schools that need to be looked at carefully as they are developed or as development occurs around them so as to protect them from excessive levels of noise as defined in the Element. The monitoring program that is suggested in the Element must be designed in conjunction with the County Health Department and the firms that would supply the County with the necessary equipment to carry on monitoring of noise at critical points in the County.

ANY ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED:

It is inevitable that some concern may be expressed by residents as a result of monitoring noise in and around communities since they may not be familiar with the requirements of State, Federal and Local laws. This may result in some people being concerned enough to write or telephone their supervisors or presenting opposition arguments to updating the Element in the future.

Adverse environmental impact could occur when walls might be required adjacent to highways in order to mitigate noise problems. The aesthetics of wall berm and planting treatments adjacent to highways could be unattractive if not designed well or if inadequate maintenance is given to walls and plantings as they deteriorate over time. The validity of wall treatments along highways is generally considered by planners to be worth the value of requiring the walls, particularly when access is restricted from lots backing up on highways primarily because of the safety features of the idea. The fewer people that have access to major roads where access is not controlled, the less accidents are apt to occur. The adverse impact on the environment then, is offset by safety features and protection of very costly highway improvements. In addition, land used for mitigation of noise could remove land from productive use. A balance between cost and mitigation of adverse effects of noise would have to be sought.

The background levels of noise that presently exist in the County are relatively low since the County is primarily rural in character, the communities are small, and the manufacturing

be less significant in its impact.

In order to mitigate adverse environmental impact of the aesthetics of highway treatment, the Element suggests alternatives such as building placement, other uses of land adjacent to highways rather than residential or critical facilities, dense plantings, limitations of truck traffic and limiting density or intensity of land uses adjacent to highways. In addition, the use of air conditioning and sound proofing of structures is required under various federal and state laws. Design of roadbeds can also be a mitigation measure where new pavement materials can be utilized. Litter laws are in existence and could be more strongly enforced where back up of lots on highways plus wall treatment would be found necessary. Plantings in conjunction with walls and plot plan review are other alternatives that would be most appropriate in urban areas.

Where land is being removed from productive use for mitigation purposes, it is possible to develop ways to marginally use such lands and thereby obtain (or retain) some economic returns. An example would be parking facilities, garages, storage uses or beautification of a commercial facility.

ALTERNATIVES TO THE PROPOSED ACTION:

The obvious alternative of no project would allow continued, uneducated exposure of man and his works to noise hazards. The County would have no basis for addressing the problem of noise in terms of County policy, the staff would have no basis for writing an Environmental Impact Report, staff studies, and general plan elements. Transportation and land use decisions would go on without the benefit of additional information that could be useful in decision making. This alternative is not feasible if only from the standpoint that there is a State mandate to prepare the Element and adopt it at the local government level.

The second alternative of course, would be to delay the project. The State has allowed the County additional time to adopt the Element and the County has utilized that time to prepare additional studies. This would have the same effect as having no project until such time as a decision was made to allow the project to go ahead.

The third alternative would be to allow the project which would offer the opportunity for planning to channel man's activities such as land use decisions and transportation decisions as well as building decisions in such a way that the potential noise hazards and problems could either be mitigated or eliminated. The environment would be safer and healthier for all concerned if the proposals in the project were carried forth.

The fourth alternative of course is to allow the project and then do nothing about it. This would involve adopting the element but never carrying out the policies or reflecting the policies in day to day decisions of planning and building.

This would have the same impact as no project.

There are numerous other ways to develop alternatives to the plan and programs proposed; however, these would be piecemeal and would be scattered about in various pieces of legislation and there would be no central place for recognizing the problem of noise in the environment, if the Element were not put together in the way that it has been done. A General Plan Element is a coordination device and can be used effectively if it pulls together fragmented pieces of policy already existing and puts them into a general plan framework. Citizens and other people interested in how decisions are made regarding noise can then find them easily and have ready access to necessary information. Decisions cannot be made without information and this is one of the reasons that Elements are prepared.

THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY:

In terms of the environment, there are cumulative effects that result from increasing background levels of noise as well as increasing point sources of noise. For example, the background noise level in and around a particular structure may average out at 45 or 50 decibels as measured in the A weighting scale, on a daily basis. An increase of 6 decibels would double the noise level. Therefore, it is important to have precise monitoring equipment in order to determine background levels in and around critical facilities throughout the County, as well as transportation routes and corridors.

The local short-term use of man's environment may mean that someone wishes to build a rest home in a specific location. The noise level is monitored and no impact is noted. The summer months come along and all of a sudden the noise level increases significantly. Meanwhile, the project has already been constructed and the long-term impact of the decision begins to appear. It may be that nearby industrial uses in the vicinity have to use roads or highways adjacent to the rest home. The industries may have been located there first but the noise level was never contemplated in terms of the long-term effects that would occur in relationship to the rest home. This is an example where conflict could occur between short versus long-term productivity or use of the environment. In essence then, the Noise Element suggests that a long-range monitoring program be undertaken in order to offset problems associated with local short-term decisions made in regard to land use and transportation as well as critical facilities. In addition, traffic counts on major highways and roads throughout the County are aggregated in such a way within the Element to give at least preliminary indication of where the problem might exist. Once it can be ascertained that there is a general problem, then the more specific problem can be isolated and worked upon.

The Element does not pose long-term risk to health or safety but on the contrary seems to mitigate such risks and hazards due to noise. There would obviously be some cost over a long-term period of time in mitigating noise. These costs are primarily in the maintaining of a data bank, providing staff support for the function, and providing initial equipment for monitoring noise levels in and out and throughout the County and for the cities on a contract basis if they wish to have it. In addition, the cost of fuel and automobile usage would increase. It also is estimated that initial cost of equipment for monitoring would be in the neighborhood of approximately \$3,000. These costs could be off-set somewhat by the County providing this service is on a contract basis to developers and other private and governmental agencies, as well as cities. On balance, the economic cost from the short range perspective are outweighed by the long-range benefits that can be given by the County in terms of service.

It is also true that the project is justified in that noise levels are increasing due to technology, greater number of automobiles, and urbanization taking place in the County. Noise hazards and problems do exist in portions of the County' and the sooner planning commences to reduce or eliminate noise, then the sooner the limitation of such hazards can begin. This would then make the environment safer for people and their activities and create less consternation and concern on the part of citizens regarding problems associated with noise and safety from associated health hazards. The long-term productivity of man's environment would be enhanced by policies contained in the Element if implemented.

ANY IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED
IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED:

There would be irreversible environmental changes involved in The proposed action, but these would be positive as pointed out in the previous section. If the environment is left to be unplanned and no consideration is given to the problem of noise then the potential for increasing levels of noise and endangerment to human health would exist. It should be recognized, however, that there are limitations to the Element and the policies contained therein. Individuals have the right to create their own environments within their households, within their automobiles, and place they work in many cases, and the Element can only suggest ways in which to resolve the problem of noise if individuals wish to take action voluntarily. For this reason, the policies deal primarily with government actions that can be taken while some of the recommendations contained in the Element deal with action that can be taken by citizens to deal with the problem of noise themselves.

GROWTH INDUCING IMPACT OF THE PROPOSED ACTION:

Growth inducing aspects of the project would tend to occur when land uses were shifted from one place to another within the County or where transportation routes or corridors were shifted or altered in some way, or where government actions are taken with consideration of the Noise Element being of paramount importance.

As for increasing the population growth, this would be unlikely as a result of the adoption of a Noise Element. The implications of the Noise Element are if noise levels could be reduced particularly in cases where high density units are being proposed then it would make it more feasible to introduce higher density living units into the environment.

Whether or not this is a growth inducing impact is questionable since the developer could just as easily move a project to another location or mitigate the noise problem.

COORDINATION:

This Environmental Impact Report was prepared by the Del Norte County Planning Department in accordance with the directives of the Del Norte County Board of Supervisors.

SEISMIC SAFETY-SAFETY ELEMENT

THE ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

The major impact of the seismic safety-safety element would be positive since the element would reduce the loss of life, injury, damage to property, and social and economic dislocations associated with geologic, seismic, hydrologic and fire disasters. This reduction in losses, however, is attainable only at a cost to the individual property owner and to the community in general.

The preparation of geologic and/or soils reports required prior to construction in a hazard zone would be one expense borne by the individual. This expense may represent a significant portion of the project cost where reports are required for single family dwellings. However, preparation of such a report would be a wise investment on the part of the owner by providing valuable predevelopment information. In many cases, setbacks and/or structural design can significantly increase the safety of a building and its occupants.

Another expense to the individual property owner would be that of unfulfilled investments. This cost would be incurred in cases of extremely hazardous sites where alternate location or structural design cannot mitigate the hazards to within acceptable levels, limiting or actually prohibiting construction. The total cost of unfulfilled investments cannot be estimated since the total amount of unbuildable land in Del Norte County is unknown.

While increased safety features can be attained in new construction for a relatively small portion of the project cost, the expense of strengthening existing buildings could be extremely high. For individual property owners as well as for the County and City, this cost may be so high as to be prohibitive and the building may have to be destroyed. Destruction of certain buildings may result in relocation problems for persons living or working there.

In addition to the actual costs of strengthening an existing building, once upgraded, the assessed valuation (and thereby taxes) of that building usually increase.

The possibility exists that, after careful consideration, the use of some critical facilities may have to be terminated due to their relative location in a hazard zone. This possibility represents a significant financial impact, particularly if the facility is fairly new.

Administration of the various programs recommended in the Seismic Safety-Safety Element would be a cost incurred by the local government.

Local government revenue may actually be reduced if programs which offer high seismic, flood and fire safety standards are implemented. Limitation or prohibition of development in hazardous areas would reduce property taxes, the primary source of income for local governments.

ANY ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

If the recommendations of the Del Norte Seismic Safety-Safety Element are implemented, the costs discussed in the previous section cannot be avoided. They can, however, be minimized or redistributed more equitably as proposed in the following section.

MITIGATION MEASURES PROPOSED TO MINIMIZE THE IMPACT

The element itself was designed to minimize some of the risks of living and working in areas of seismic, geologic, hydrologic or fire hazard. Some initial investments by the private and public sectors, however, will be necessary to ensure reduction in losses due to these hazards. Some of the costs can be minimized or redistributed more equitably by the following mitigation measures:

1. The cost of preparing geologic or soils reports could be minimized in areas where geologic conditions are the same, or similar, on several parcels by the establishment of a special Service Area. This would result in a single geologic investigation financed collectively by the owners of all of the parcels within the Service Area.
2. When development is limited or actually prohibited as a result of hazards, the assessed value, and therefore the property tax, is generally reduced. While this reduction in tax offers some compen-

sation, steps must be taken to eliminate the creation of unbuildable lots. The requirement for reports prior to division of land in hazardous areas should minimize this occurrence in the future.

3. The requirement for property reports, which would include information on the site conditions, to be made available prior to consummation of property sales, should eliminate investments in unbuildable lots by unwary buyers.
4. Profitable alternative uses, such as agriculture, would, in some cases, mitigate the financial impact of unbuildable lots.
5. Individuals choosing to keep property located in geologically hazardous areas in non- or limited use should be encouraged through the reduction in taxes afforded by open space easements.
6. Any program for the abatement of hazardous buildings must take into consideration its economic impacts. Programs should be long-range in order to minimize economic impacts and dislocation problems. Structures should be allowed to remain if their use is made less critical or if their occupancy is significantly reduced. Additionally, special consideration should be given to the preservation of buildings of historic or aesthetic value; funds should be made available to strengthen, rather than eliminate, them whenever possible.
7. The financial impact of terminating the use of critical facilities located on extremely hazardous sites could be greatly minimized by the amortization of the building over its economic life or before any major improvements are necessary.
8. The present tax system offers no incentive for correcting earthquake hazards in existing structures. It, in fact, tends to discourage it. It is recommended, therefore, that the assessed valuation of property not be increased when seismic safety improvements are made.
9. The costs incurred by local government in the administration of the programs recommended in the element could be passed on by various fees to the individual owning a hazardous building or wishing to live or build in a hazardous area.
10. Augmentation or replacement of the property tax as the principle income base of local governments, as well as State or Federal incentives to communities for high seismic safety standards in planning, would provide encouragement and compensation to the community and the

individual. Additionally, if a Federal insurance program were initiated, much of the cost of reconstruction following a natural disaster would be borne by the individuals choosing to live in higher risk areas rather than the taxpayers at large, as is now the case with post-disaster financial assistance.

ALTERNATIVE TO THE PROPOSED ACTION

The "no plan" alternative, in addition to not satisfying the State mandate for the preparation of seismic safety and safety elements, would result in significant losses to life and property in the event of a moderate to great natural disaster. The 1964 flood alone is estimated to have caused \$17,875,000 in property damage and took several lives.

Absolute safety, on the other hand, is neither possible nor feasible. There comes a point where in terms of real or personal property, the benefit-cost ratio is too low to justify the loss-reduction measures.

THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Since a major earthquake, forest fire, or flood some time in the future is inevitable, the element is based on the long-term perspective of protecting public safety and reducing disaster costs. By closely regulating development in hazardous areas and encouraging open space/agricultural or very low density residential uses, the short-term use of hazardous lands does not preclude this long-term goal.

ANY IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

The element would not result in any irreversible changes. It, in fact, prevents the commitment of hazardous land to high density uses. Regulation of development and encouragement of open space uses leaves the options open for this land. If, at some future date, conclusive evidence can be presented to warrant the easing of these restrictions, development could occur.

THE GROWTH INDUCING IMPACT OF THE PROPOSED ACTION

Land use policies as recommended in the element would limit growth in hazardous

areas. This reduction may increase the pressures for growth and higher density development in the more suitable areas of the County.

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